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GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY(U)
FEDERAL AVIATION ADMINISTRATION WASHINGTON DC OFFICE OF
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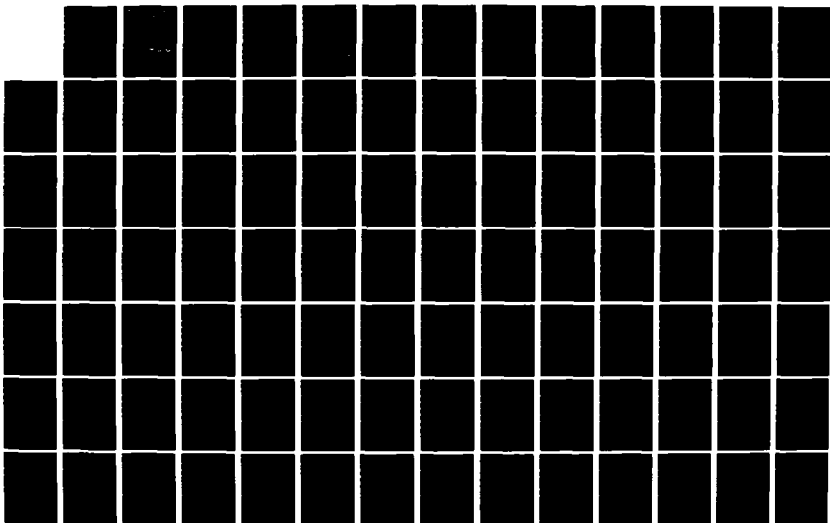
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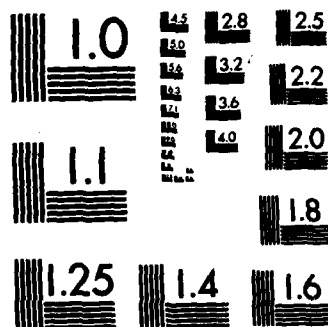
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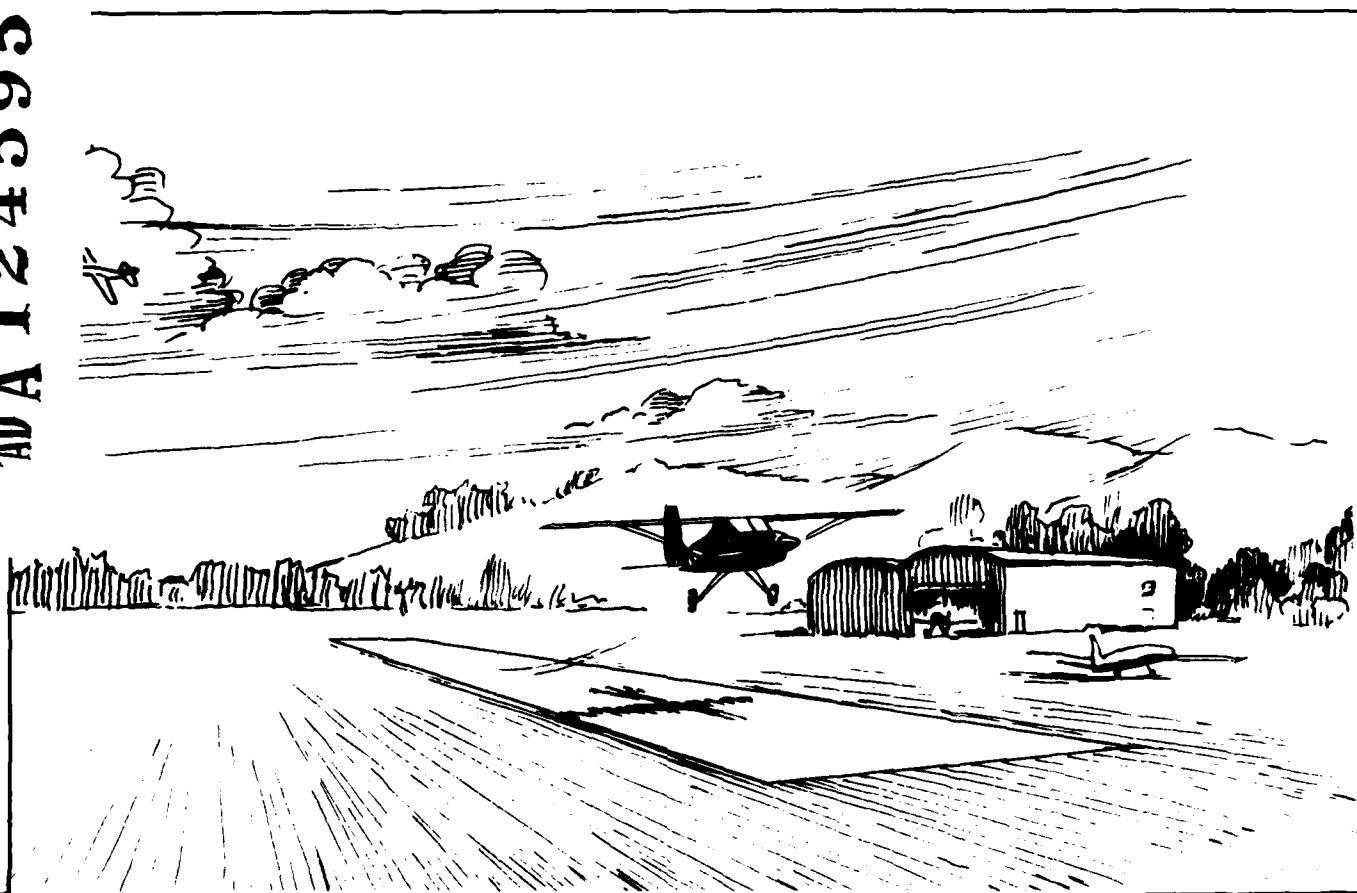
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Annual Summary Report 1981 Data

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December 1982

Office of Management Systems
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16. Abstract This report presents the results and a description of the 1981 General Aviation Activity and Avionics Survey. The survey was conducted during 1982 by the FAA to obtain information on the activity and avionics of the United States registered general aviation aircraft fleet, the dominant component of civil aviation in the U.S. The survey was based on a statistically selected sample of about 8.9 percent of the general aviation fleet and obtained a response rate of 61 percent. Survey results are based upon responses but are expanded upward to represent the total population. Survey results revealed that during 1981 an estimated 40.7 million hours of flying time were logged by the 213,226 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 188.1 hours. The active aircraft represented about 83 percent of the registered general aviation fleet. The report contains breakdowns of these and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Also included are fuel consumption, lifetime airframe hours, avionics, and engine hours estimates. In addition, tables are included for detailed analysis of the avionics capabilities of GA fleet.			
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METRIC CONVERSION FACTORS

Approximate Conversions from Metric Measures			
Symbol	When You Know	Multiply by	To Find
m cm mm km m	meters centimeters millimeters kilometers meters	LENGTH	
		0.30	inches
		0.4	feet
		1.1	yards
		0.6	miles
m ² ft ² yd ² mi ²	square meters square centimeters square millimeters square kilometers hectares (10,000 m ²)	AREA	
		1.10	square yards
		1.2	square miles
		0.4	square miles
		2.5	acres
g kg lb ton	grams kilograms pounds tons (2000 lb)	MASS (weight)	
		0.002	ounces
		2.2	pounds
		1.1	tons
		0.45	metric tons
l qt pt gal	liters quarts pints gallons	VOLUME	
		0.001	fluid ounces
		1.1	quarts
		1.06	gallons
		0.26	cubic feet
°C °F	Celsius temperature Fahrenheit temperature	TEMPERATURE (Celsius)	
		9/5 plus 32	Fahrenheit temperature
		5/9 minus 32	Celsius temperature

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PREFACE

This report presents the results of the 1981 General Aviation Activity and Avionics Survey. The survey is the continuation of a FAA data collection program to gain information on the activities and avionics equipment of the general aviation aircraft fleet. The results represent the cumulative effort of several agencies within the Department of Transportation. Within the FAA, the Information and Statistics Division sponsored and coordinated the activities associated with the survey, ran the system during survey production, and analyzed the survey results. The Transportation Systems Center (TSC), under Project Plan Agreement with the FAA, developed the sample design and computer system for sample selection, data editing and estimation of results, and prepared previous survey reports. TSC also transferred the survey responses to machine readable forms for the 1980 and 1981 surveys, a task that was performed by the Mike Monroney Aeronautical Center in previous surveys. The Transportation Computer Center was responsible for printing names, addresses, and aircraft information on the survey questionnaires.

The authors would like to acknowledge contributions to this report by : Nicholas Soldo and Carolyn Edwards, AMS-220, who guided the project and reviewed the report text; Marilyn Marotta of Systems Development Corporation who updated the computer programs for the 1981 survey; and Kevin Mattingly, also of SDC, who performed the production runs to produce the estimates in this report.

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EXECUTIVE SUMMARY

This report presents the results of the fifth General Aviation Activity and Avionics Survey, conducted in 1982 by the Federal Aviation Administration to obtain information on the activities and avionics of the 1981 general aviation aircraft fleet, the major component of civil aviation in the United States. The FAA selected a statistically designed sample of about 8.9 percent of the registered general aviation fleet to participate in the survey. The sampled aircraft represented all states and FAA regions, and all of the major manufacturer/model groups of aircraft. The survey was conducted through a mailed questionnaire, yielding in total a response rate of 61 percent.

Some important survey findings appear below:

- o An estimated 40.7 million hours of flying time were logged by the 213,226 active general aviation aircraft in the U.S. fleet during 1981. These aircraft had a mean annual flight time per aircraft of 188.1 hours and represented about 83 percent of the registered general aviation fleet.
- o Turboprop aircraft flew over 470 hours per aircraft during 1981, more than any other aircraft type. Moreover, twin engine turboprops with thirteen or more seats flew almost 1000 hours per aircraft. In contrast, single engine piston powered aircraft averaged about 166 hours per aircraft during the year.
- o The most common primary use of a general aviation aircraft was personal for an estimated 45 percent of the active fleet, followed by business for 22 percent of the fleet, and executive for 9 percent of the fleet.
- o The most populous region in terms of based aircraft was the Great Lakes Region, housing an estimated 19 percent of all registered general aviation aircraft, followed closely by the Western Region with 18 percent. The most populous state was California, housing 14 percent of the registered aircraft.
- o Over 81 percent of the general aviation aircraft had two-way VHF communication equipment, 62 percent were equipped with 4096-code transponders, about 54 percent had at least one component of an instrument landing system, and 78 percent had some form of navigation equipment.

- o An estimated 23 percent of general aviation aircraft had avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 70 percent of the GA fleet could not fly above 12,500 feet due to avionics limitations alone.
- o An estimated 41 percent of the active general aviation fleet flew by instrument flight rules (IFR) at some time during 1981.
- o The general aviation aircraft fleet consumed an estimated 1,247 million gallons of fuel during 1981, 489 million gallons of aviation gasoline and 759 million gallons of jet fuel.

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1. INTRODUCTION

1.1 GENERAL

1.1.1 Purpose of Survey

The purpose of the General Aviation Activity and Avionics Survey is to provide the Federal Aviation Administration (FAA) with information on the activity and avionics of the general aviation fleet. Figure 1.1 underscores the importance of general aviation to the United States civil air fleet. During calendar year 1981 general aviation composed almost 99 percent of the U.S. civil air fleet¹, accounted for 83 percent of civil operations at FAA towered airports², and logged over 83 percent of the total hours flown by the U.S. civil air fleet³. The information obtained from the survey enables the FAA to monitor the general aviation fleet so that it can, among other activities, anticipate and meet demand for National Airspace System facilities and services, assess the impact of regulatory changes on the general aviation fleet, and implement measures to assure the safe operation in the airspace of all aircraft.

1.1.2 Background

Prior to the current survey method, the FAA used the Aircraft Registration Eligibility, Identification, and Activity Report, AC Form 8050-73, in its data collection program on general aviation activity and avionics. The form, sent annually to all owners of civil aircraft in the U.S., served two purposes: (1) Part 1 was the mandatory aircraft registration renewal form; (2) Part 2 was voluntary and applied to general aviation aircraft only, asking questions on the owner-discretionary characteristics of the aircraft such as flight hours, avionics equipment, base location, and use. In 1978, the FAA

¹Census of U.S. Civil Aircraft, Calendar Year 1981, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1982), p.4.

²"FAA Air Traffic Activity, Calendar Year 1981 Report," Federal Aviation Administration, (Washington, DC, 1982).

Note: General aviation as used in this report combines both general aviation and air taxi from the source above.

³Air Carrier: Census of U.S. Civil Aircraft, Calendar Year 1981, U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1982), p. 21. General Aviation: Table 2.4.

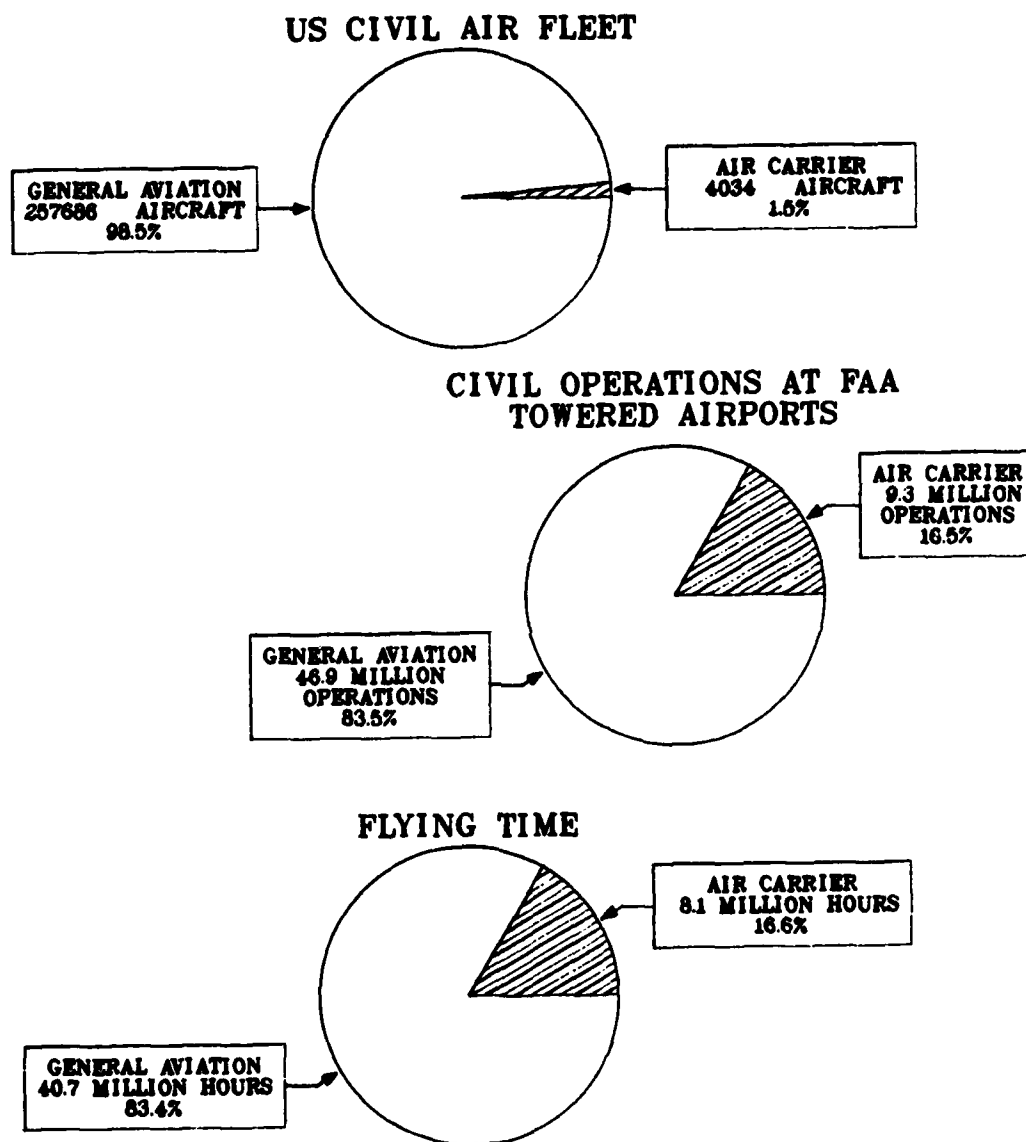


FIGURE 1.1. A CONTRAST OF GENERAL AVIATION AND AIR CARRIER ACTIVITY IN 1981

replaced AC Form 8050-73 with a new system: Part 1 was replaced by a triennial registration program; Part 2 was replaced by the General Aviation Activity and Avionics Survey, FAA Form 1800-54. (See Appendix A.3.) The survey was to be conducted annually based on a statistically selected sample of general aviation aircraft, requesting the same type of information as Part 2 of AC Form 8050-73. The first General Aviation Activity and Avionics Survey took place in 1978, collecting data on the 1977 general aviation fleet. The 1981 statistics in this report were derived from the fifth survey, which took place in 1982. Benefits resulting from the new method of data collection included quicker processing of the results, improved data quality, and a considerable savings in time and money to both the public and the Federal Government.

1.2 SURVEY COVERAGE

1.2.1 Aircraft

The General Aviation Activity and Avionics Survey covers, through a stratified probability sample, all general aviation aircraft registered in the United States. The term "general aviation," as used for this survey, is defined as all aircraft in the U.S. civil air fleet except those operated under Federal Aviation Regulations Parts 121 and 127. These two parts cover the operations of fixed wing aircraft and rotorcraft, respectively, that 1) have been issued a certificate of public convenience and necessity by the Civil Aeronautics Board authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations, and 2) are used by large aircraft commercial operators. General aviation thus includes aircraft operated under:

Part 91: General operating and flight rules.

Part 123: Certification and operations: air travel clubs using large airplanes.

Part 133: Rotorcraft external load operations.

Part 135: Air taxi operators and commercial operators of small aircraft.

Part 137: Agricultural aircraft operations.

General aviation offers such varied services as air taxi, air cargo, industrial, agricultural, business, personal, instructional, research, patrol, and sport flying. General aviation

aircraft range in complexity from simple gliders and balloons to four engine turbojets.

Certain aircraft meeting the general aviation criteria have been excluded from the survey. This group consists of aircraft registered to dealers, aircraft in the process of being sold or with registration pending, and aircraft for which not enough information was available to categorize them properly for sampling purposes.

1.2.2 Geographic

The sample survey covers general aviation aircraft registered with the United States Aircraft Registry as of December 31, 1981. Over 99 percent of these aircraft are registered to owners living in the 50 states and Washington, DC, with about 0.2 percent (555 aircraft) registered in Puerto Rico and other U.S. Territories, and 0.2 percent (436 aircraft) registered to owners living in foreign countries.

1.2.3 Content

Appendix A.3 contains a copy of the survey questionnaire, FAA Form 1800-54. The questionnaire requests the owner to provide information on the sampled aircraft's characteristics and uses for various periods:

- 1) Hours by use, IFR hours, and fuel consumption for entire calendar year 1981,
- 2) Airframe hour reading and location of aircraft base as of December 31, 1981, and
- 3) Avionics equipment currently on board.

1.3 SURVEY METHOD

The main method of collecting data for this survey was the mail questionnaire, sent to the owners of the sampled aircraft in two mailings. The first mailing in March, 1982, covered all 22,980 aircraft in the sample and had a response rate of 49 percent as shown in Table 1-1. This was about 81 percent of the total responses to the survey. The second mailing conducted in April, 1982, included only those aircraft in the sample that had not yet responded. The second mailing had a response rate of 23 percent which accounted for 19 percent of the total responses to the survey. The combined response rate for the two mailings was 61 percent.

¹Source: FAA Aircraft Registration Master File as of December 31, 1981.

TABLE 1-1. SUMMARY OF RESPONSE INFORMATION BY SURVEY PHASE

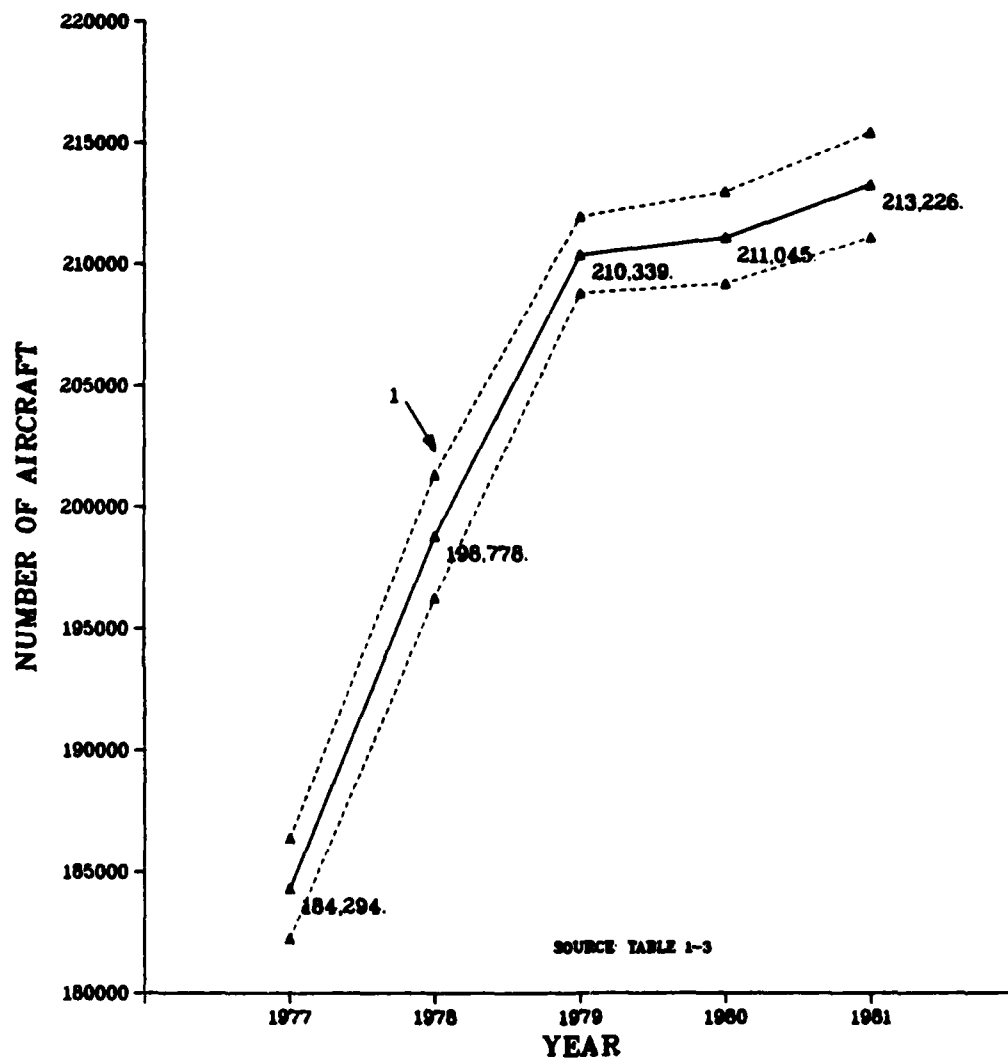
SURVEY PHASE	SAMPLE SIZE (S)	NUMBER OF RESPONSES (R)	RESPONSE RATE (R/S X 100%)	PORTION OF TOTAL RESPONSE [(R/TOTAL R) X 100%]
FIRST MAILING	22,980	11,255	49%	81%
SECOND MAILING	11,725	2,672	23%	19%
TOTAL	22,980	13,927	61%	100%

1.4 SUMMARY OF SURVEY RESULTS¹

1.4.1 National Scene

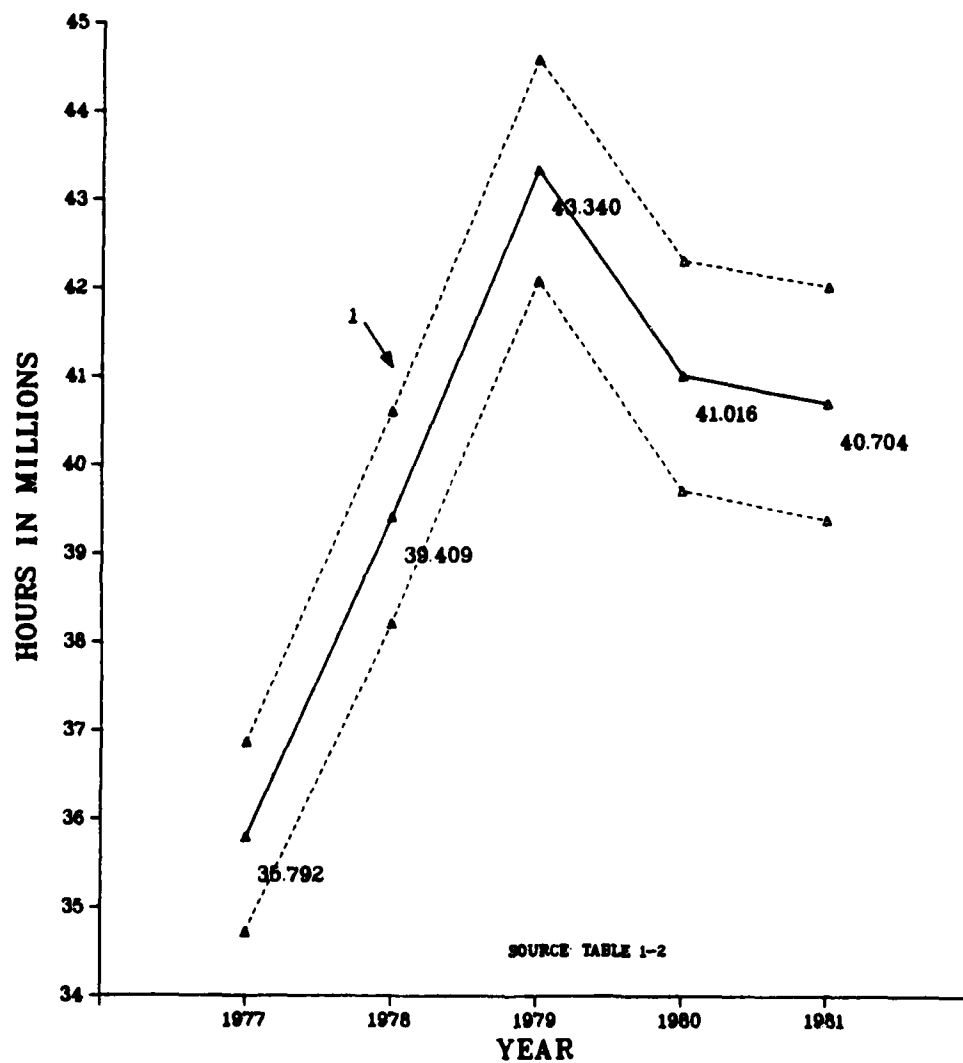
Results of the General Aviation Activity and Avionics Survey at the national level revealed that during 1981 an estimated 40.7 million hours of flying time were logged by the 213,226 active general aviation aircraft in the U.S. fleet, yielding a mean annual flight time per aircraft of 188.1 hours. These active aircraft comprised 83 percent of the registered general aviation fleet. The statistics for 1981 showed a 0.8 percent decrease in flying hours, a 1.0 percent increase in the number of active aircraft in the general aviation fleet, and a 1.3 percent decrease in mean hours per aircraft over the comparable figures for 1980. Longer-term trends for these variables are found in Figures 1.2, 1.3, and 1.4. Activity estimates for 1981 indicate an overall slowing in the growth of general aviation activity. The decrease seen in hours flown can most likely be attributed to the decline in the economy and rising fuel and aircraft operational costs. Other general aviation activity measures showed trends similar to those seen in the General Aviation Activity and Avionics Survey. For example, general aviation operations at FAA towered airports decreased by 10.4% from 1980 to 1981. Some of this decrease may be attribute to the air traffic controller strike which occurred during 1981. On August 3, about 11,000 controllers failed to report to work and were subsequently fired. The resultant reduced work force caused the FAA to institute certain constraints on users of the National Airspace System to assure safe and efficient operations. Reductions in traffic levels due to restrictions imposed by the FAA cannot be measured precisely, because of the effects of other variables which impact traffic volumes.

¹ See Appendix B.1 for a discussion of effects of changes in the sample frame on the survey results.



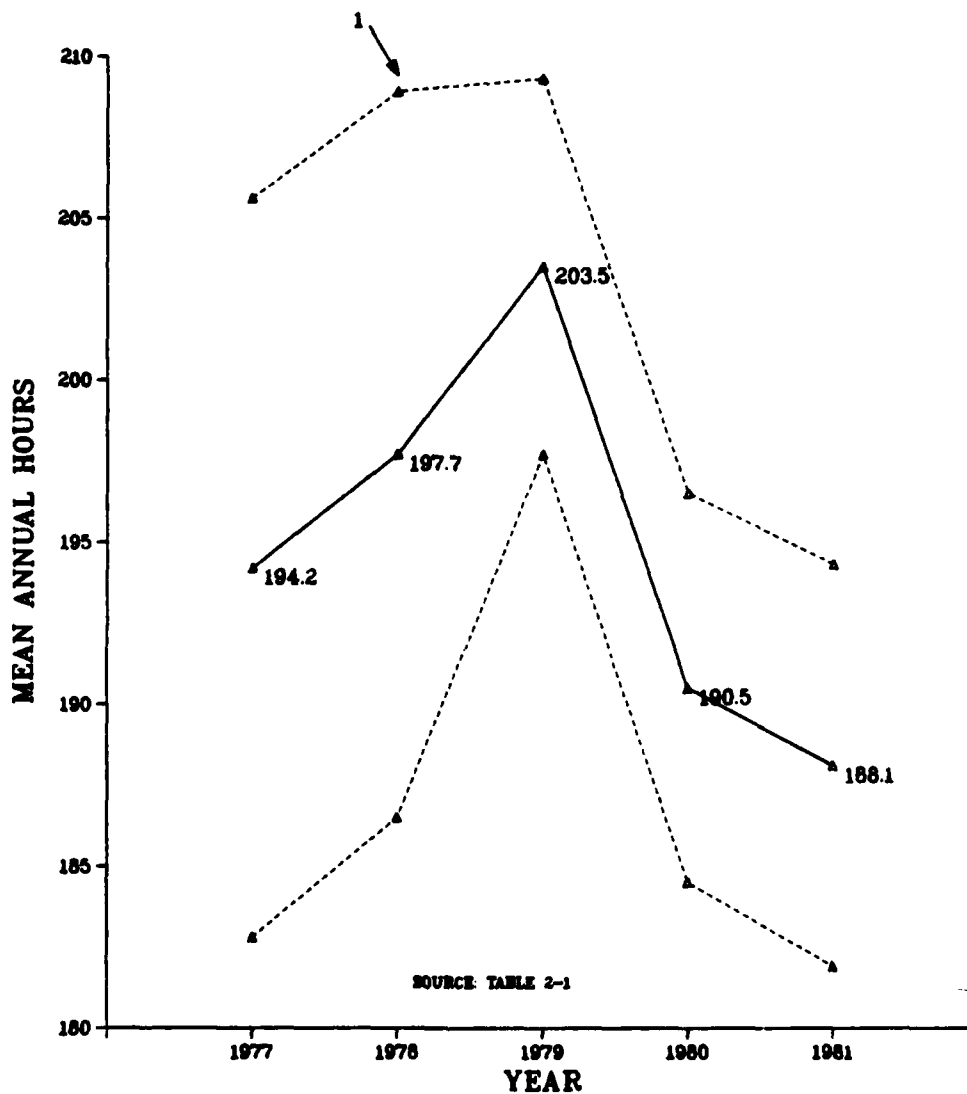
1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE
1977 - 1981 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.2. GENERAL AVIATION ACTIVE FLEET SIZE 1977 - 1981



1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1977 - 1981 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.3. GENERAL AVIATION TOTAL FLYING TIME 1977 - 1981



1. THE DASHED LINES REPRESENT A 95% CONFIDENCE INTERVAL FOR THE 1977 - 1981 TRUE VALUES. SEE APPENDIX B.

FIGURE 1.4. GENERAL AVIATION MEAN ANNUAL FLYING TIME FOR ACTIVE AIRCRAFT 1977 - 1981

1.4.2 Results by Aircraft Type

Although both the total flight time and the active aircraft count for the general aviation fleet grew at about the same annual rate (3.48 percent and 3.76 percent, respectively) from 1977 through 1981, significant deviations from these mean fleet rates occurred among the individual aircraft types. The following two tables illustrate this point. Tables 1-2 and 1-3 contain the four-year trends in growth for total hours flown and active aircraft, respectively. The last column in both tables is the compound annual growth rate by aircraft type from 1977 to 1981. In Table 1-2 the fastest growth of any type in terms of total hours flown occurred to the turboprop other category with an annual growth rate of 24.41 percent. This category was followed by the twin engine turboprops with 1-12 seats at 15.25 percent. In contrast, single engine piston airplanes with 4 or more seats and twin engine piston planes with 1-6 seats experienced very little growth during the period. In general, it was the activity of the more sophisticated aircraft in the general aviation fleet that grew faster than the other components of the fleet. Similar results are shown in Table 1-3 for the active aircraft counts.

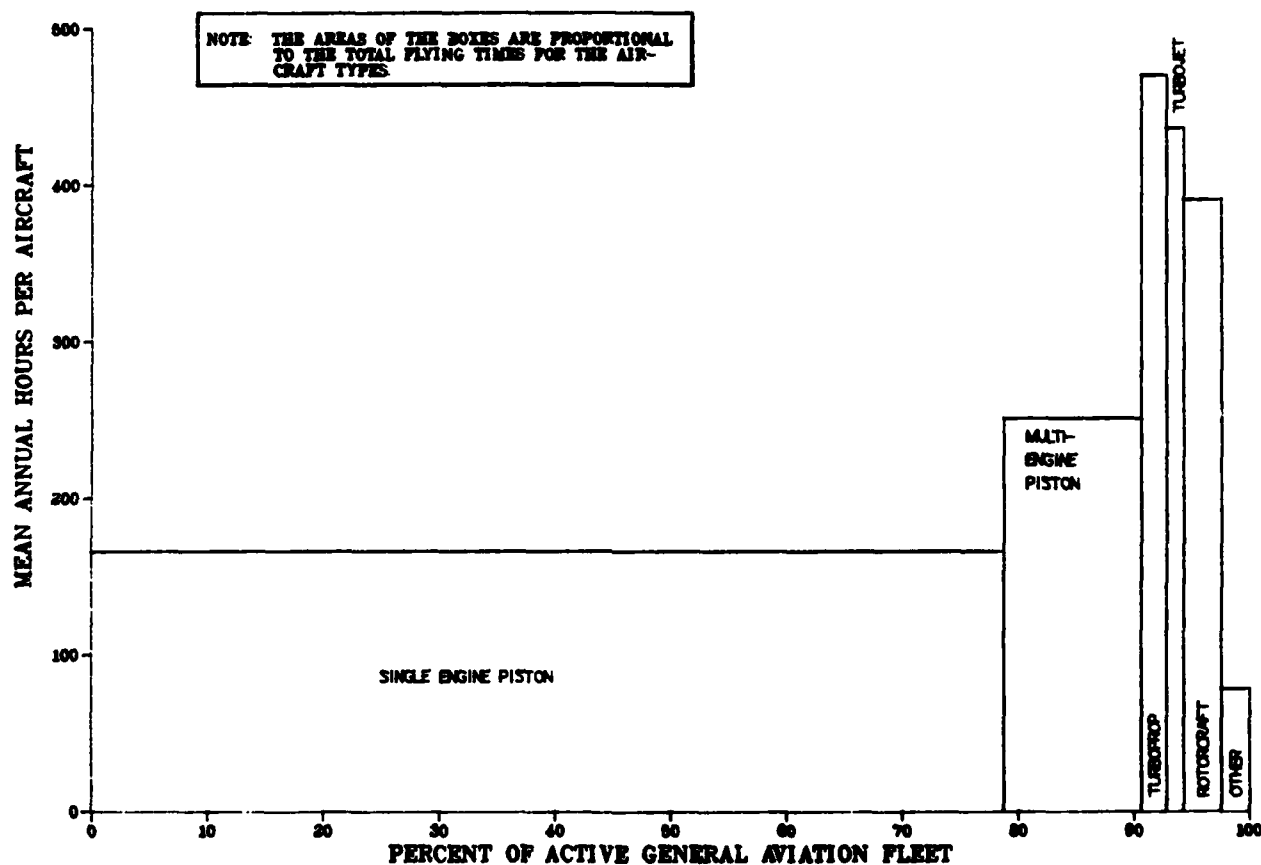
There was a great deal of variation in activity among the general aviation aircraft types in terms of three measures resulting from the survey: total hours flown, number of active aircraft, and mean hours flown. Figure 1.5 highlights the variation, as well as the relationship of these three measures to each other. Distance along the vertical axis indicates mean flight hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet belonging to each aircraft type, and the area within each box is proportional to the total flying time for the aircraft type. Thus, it is evident that in terms of sheer numbers, single engine piston aircraft dominated the active fleet and contributed the largest portion of total flying time, yet had one of the lowest mean flight times per aircraft. In contrast, the turboprops, turbojet aircraft, and rotorcraft had low representation in the active fleet but contributed a relatively high proportion of flight time resulting in the greatest mean flight hours of any of the major aircraft types.

TABLE 1-2 GROWTH OF GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE, 1977 - 1981
(Thousands of Hours)

AIRCRAFT TYPE	1977 (Standard Error)	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING						
1-engine piston 1-3 seats	8,973 (629)	10,111 (570)	11,180 (384)	10,044 (399)	10,185 (399)	3.62
1-engine piston 4+ seats	15,944 (824)	17,746 (992)	19,109 (420)	18,295 (428)	17,506 (432)	2.60
2-engine piston 1-6 seats	3,630 (202)	3,644 (241)	4,006 (148)	3,730 (172)	3,606 (144)	0.02
2-engine piston 7+ seats	2,322 (102)	2,439 (189)	2,855 (137)	2,547 (143)	2,762 (153)	4.93
Other piston	96 (5)	104 (7)	152 (15)	130 (18)	24 (63)	-10.38
2-engine turboprop 1-12 seats	892 (37)	960 (49)	1,254 (57)	1,489 (55)	1,549 (68)	15.25
2-engine turboprop 13+ seats	625 (60)	622 (63)	572 (45)	964 (55)	542 (45)	4.05
Other turboprop	32 (5)	24 (3)	45 (2)	56 (10)	62 (11)	24.41
2-engine turbojet	1,043 (49)	1,019 (44)	1,125 (39)	1,163 (52)	1,238 (48)	4.48
Other turbojet	122 (11)	176 (30)	134 (9)	169 (27)	149 (16)	8.67
ROTORCRAFT						
Piston	609 (90)	806 (79)	892 (97)	736 (75)	930 (108)	12.97
Turbine	1,259 (93)	1,421 (135)	1,664 (108)	1,603 (115)	1,754 (150)	8.93
OTHER	245 (16)	338 (20)	353 (29)	359 (21)	391 (34)	13.25
TOTAL AIRCRAFT	35,792 (1,073)	39,409 (1,199)	43,340 (627)	41,016 (650)	40,704 (659)	3.48

TABLE 1-3 GROWTH OF ACTIVE GENERAL AVIATION FLEET BY AIRCRAFT TYPE, 1977 - 1981
(Number of Aircraft)

AIRCRAFT TYPE	1977 (Standard Error)	1978 (Standard Error)	1979 (Standard Error)	1980 (Standard Error)	1981 (Standard Error)	Compound Annual Growth Rate in %
FIXED WING						
1-engine piston 1-3 seats	57,340 (851)	59,185 (860)	62,362 (594)	60,505 (688)	59,914 (748)	1.15
1-engine piston 4+ seats	91,960 (529)	101,466 (857)	106,028 (450)	107,930 (538)	107,983 (656)	5.32
2-engine piston 1-6 seats	15,074 (141)	15,621 (259)	16,891 (157)	16,224 (246)	16,749 (246)	2.76
2-engine piston 7+ seats	6,226 (86)	7,328 (202)	7,958 (90)	8,141 (153)	8,607 (181)	8.58
Other piston	182 (11)	221 (10)	229 (11)	212 (17)	114 (29)	7.15
2-engine turboprop 1-12 seats	2,276 (15)	2,507 (68)	2,944 (13)	3,339 (41)	3,968 (46)	14.95
2-engine turboprop 13+ seats	549 (13)	566 (10)	538 (15)	627 (18)	557 (17)	0.88
Other turboprop	64 (4)	56 (3)	96 (3)	123 (10)	134 (5)	23.99
2-engine turbojet	1,959 (19)	2,115 (27)	2,309 (29)	2,551 (37)	2,808 (68)	9.42
Other turbojet	318 (10)	364 (34)	343 (6)	441 (13)	362 (23)	4.83
ROTORCRAFT						
Piston	2,658 (176)	2,822 (155)	3,123 (127)	2,794 (133)	3,250 (173)	5.65
Turbine	2,067 (27)	2,492 (30)	2,740 (50)	3,207 (49)	3,724 (73)	15.91
OTHER	3,616 (69)	4,028 (75)	4,770 (114)	4,945 (142)	5,049 (179)	8.89
TOTAL AIRCRAFT	184,294 (1,034)	198,778 (1,269)	210,339 (789)	211,045 (945)	213,226 (1,078)	3.76



SOURCE: TABLE 2-1

FIGURE 1.5. 1981 GENERAL AVIATION ACTIVITY MEASURES BY AIRCRAFT TYPE

The general aviation aircraft fleet consumed an estimated 1,247 million gallons of fuel during 1981, 489 million gallons of aviation gasoline and 759 million gallons of jet fuel. From Figure 1.6 it is evident that turbojet and turboprop engines consume fuel at much higher rates than piston engines. In fact, turbojets with more than 2 engines consume about 765 gallons of jet fuel an hour on the average. The high rates account for turbojets' burning 39 percent of all fuel consumed in 1981, as shown in Figure 1.7. Piston aircraft account for 38 percent of the fuel consumed in 1981 due to their high representation in the general aviation fleet. Table 2-18 shows more detailed fuel consumption estimates and their standard errors.

1.4.3 Results by Primary Use

Like aircraft types, primary uses were differentiated by their activity characteristics, as shown in Figure 1.8. Distance along the vertical axis indicates the relative portion of the active fleet engaged in each primary use, and the area within each box is proportional to the total flying time for each primary use. Aircraft used as commuter air carriers, air taxis and for aerial observation purposes showed high individual usage with mean hours per aircraft of 956.7, and 388.7, and 414.3, respectively. General aviation aircraft were used most commonly for personal and business purposes, representing 45 and 22 percent of the active fleet. While total hours flown for the general aviation fleet decreased by 0.8% from 1980 to 1981, flying time for aerial application, executive, and commuter air carrier aircraft increased by 19.7%, 16.1%, and 1.2%, respectively. These were the only categories for which flying time increased from 1980 to 1981.

1.4.4 Results by FAA Region

Mean aircraft usage did not differ significantly from region to region with the exception of the Southern and European (Foreign) Regions, according to Figure 1.9. In the figure, distance along the vertical axis indicates mean annual hours per aircraft, distance along the horizontal axis indicates the relative portion of the active fleet based in each region, and the area within each box is proportional to the total flying time occurring in each region. It can be seen that the Great Lakes Region accounted for more active aircraft and the Southern Region accounted for more total flight time than any of the other regions, although the Western-Pacific and Southwestern Regions are close behind. The smallest region in continental United States was New England, with only three percent of the active aircraft and about 3% of the fleet's total flight time.

Tables 2-3 and 2-8 contain more estimates by region; Tables 2-2 and 2-7 show similar estimates by state of aircraft base.

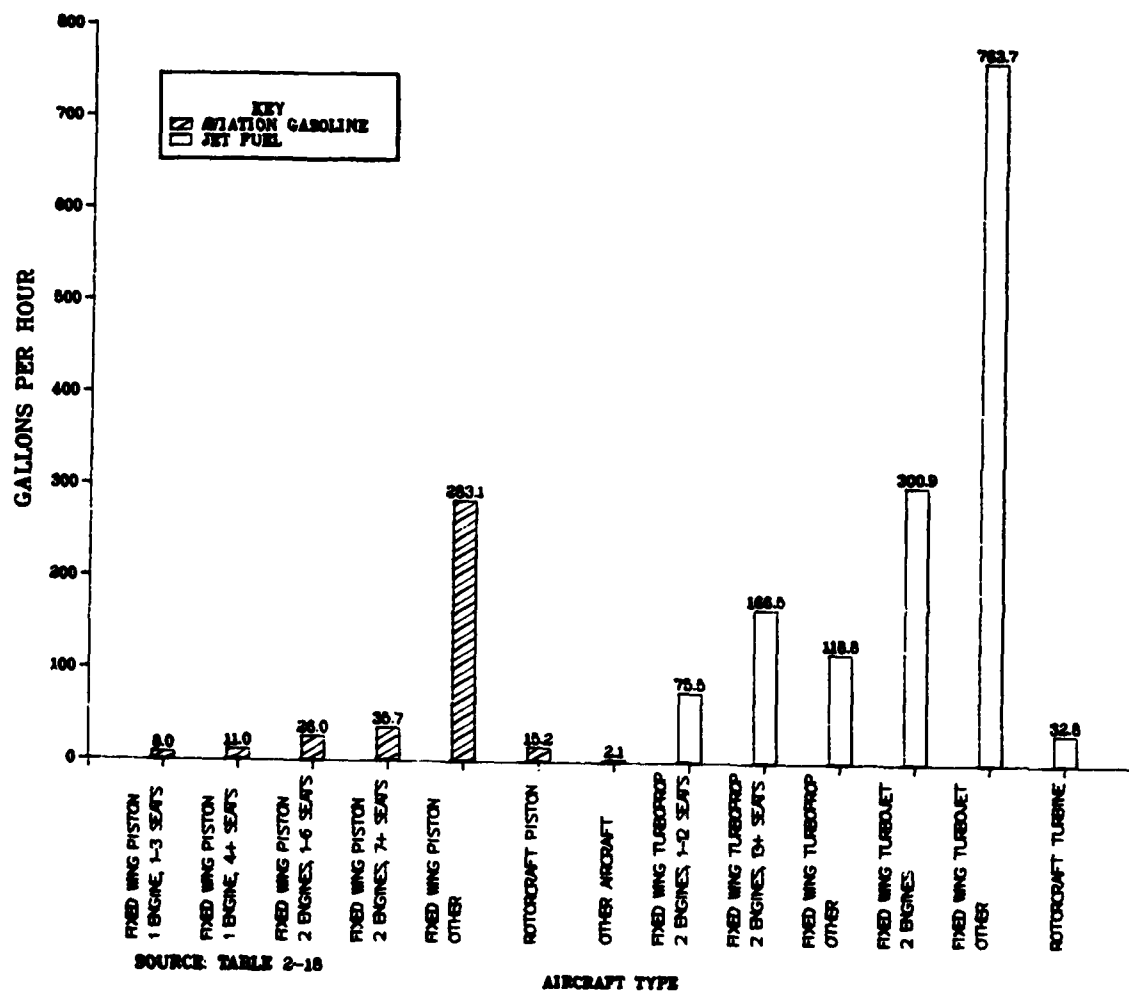


FIGURE 1.6. 1981 MEAN FUEL CONSUMPTION RATES BY AIRCRAFT TYPE

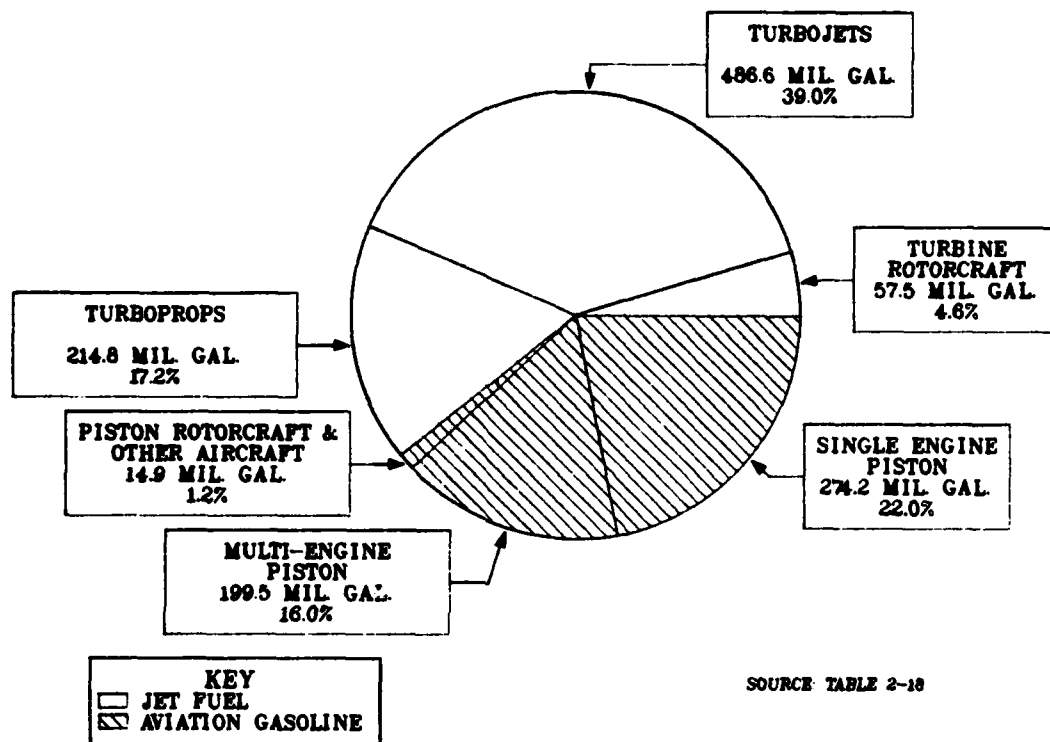
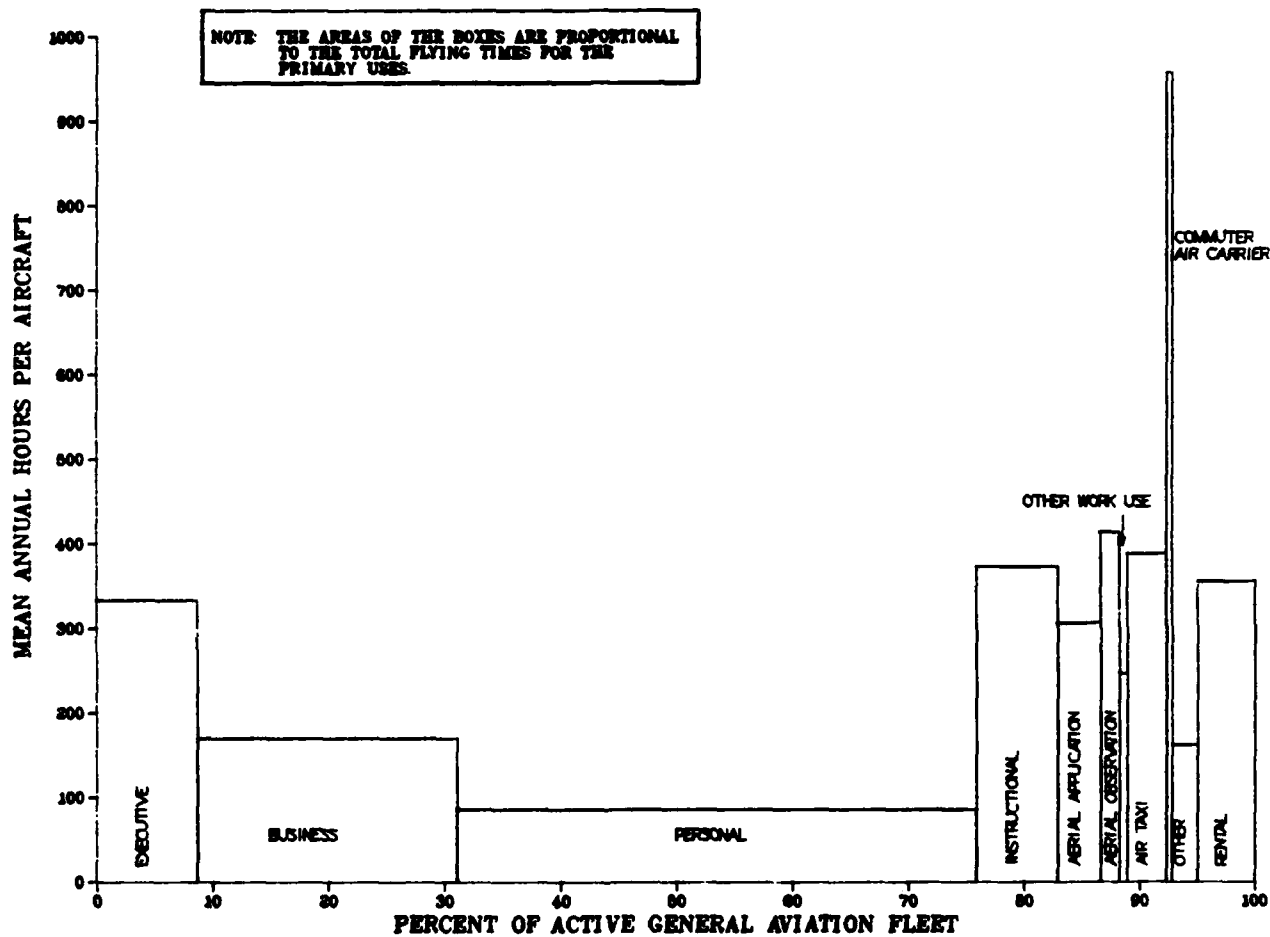
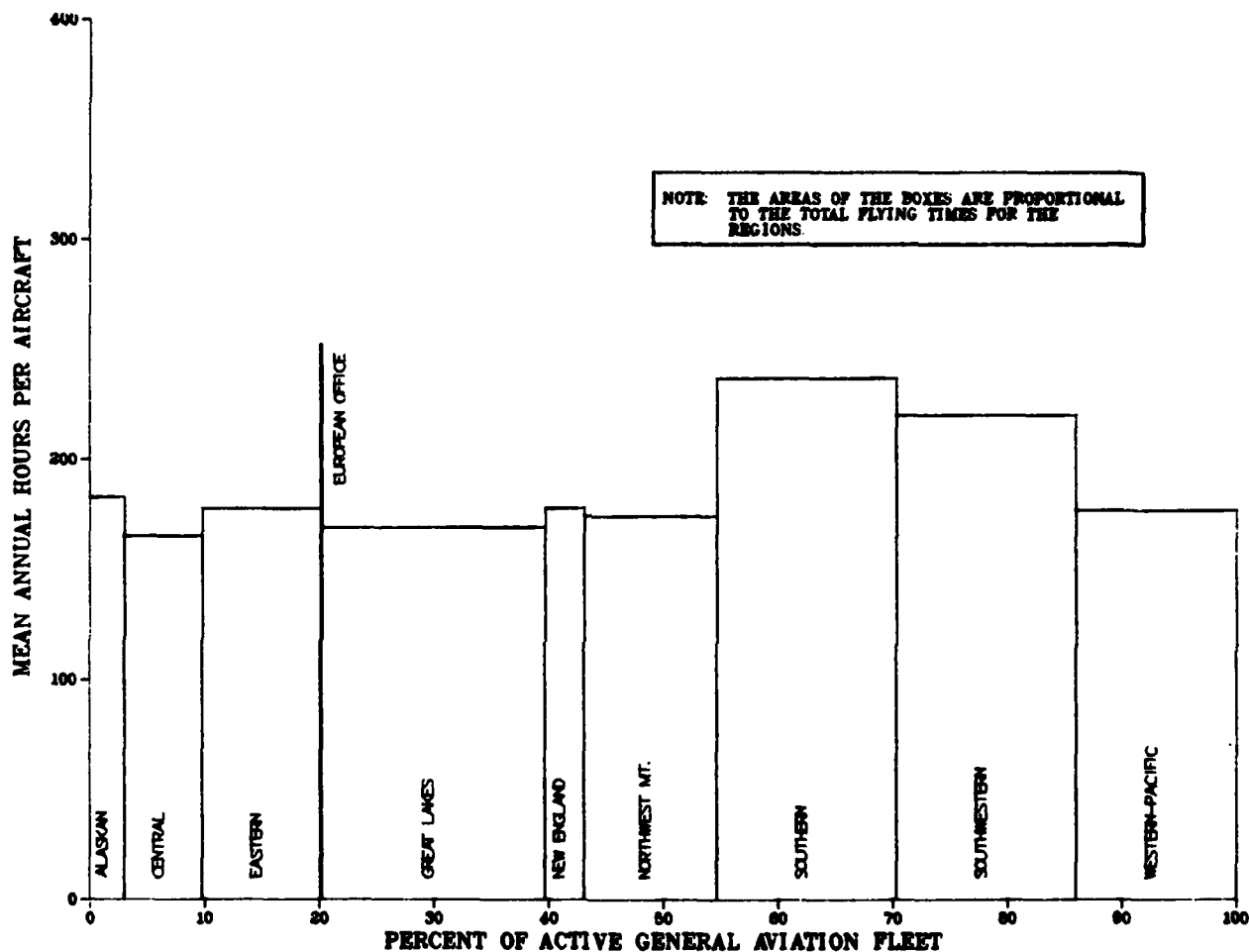


FIGURE 1.7. 1981 ESTIMATED FUEL CONSUMPTION BY AIRCRAFT TYPE



SOURCE: TABLES 2-4, 2-8

FIGURE 1.8. 1981 GENERAL AVIATION ACTIVITY MEASURES BY PRIMARY USE



SOURCE: TABLE 2-3

FIGURE 1.9. 1981 GENERAL AVIATION ACTIVITY MEASURES BY FAA REGION

1.4.5 Results by Avionics Capability

1.4.5.1 Individual Avionics Components

The extent to which general aviation aircraft are furnished with on-board avionics equipment was a principal finding of the survey. A summary appears in Figure 1.10. Over 81 percent of the aircraft have two-way VHF communications, 62 percent are equipped with 4096-code transponders, 54 percent have at least one component of an instrument landing system, and almost 78 percent have some form of navigation equipment. It is evident from comparing the 1981 and 1978 avionics estimates that the general aviation fleet is becoming more sophisticated in terms of its avionics equipment. Within two-way communications, for example, there was a significant shift from 360 channel to 720 channel equipment. Likewise with VOR receivers there was a shift from 100 channel to 200 channel equipment. The proportion of the general aviation fleet with transponders increased from 53.3 percent in 1978 to 62.0 percent in 1981, and the proportion with at least one part of an ILS increased from 51.0 percent to 54.1 percent. The proportion of aircraft having two or more communications systems and the proportion with two or more VOR receivers increased by more than five percent from 1978 to 1981. More detailed breakdowns of avionics by aircraft type, state, region, and primary use are provided in Tables 2-12 through 2-15.

Figure 1.11 shows the portion of active aircraft of each type which engaged in IFR (Instrument Flight Rules) flight during 1981 and further, the portions that flew IFR with and without transponder equipment. It can be seen that almost all active twin engine piston aircraft, turboprops, and turbojets flew IFR at some time during 1981 and were equipped with transponders. Although a much lower proportion of the active single engine piston aircraft and rotorcraft in the fleet flew IFR during the year, almost all that did were equipped with transponders. In fact, almost 100% of IFR flying was performed by aircraft equipped with transponders.

1.4.5.2 Avionics Capability Groups

Estimates of the number of aircraft containing individual pieces of avionics equipment are somewhat limited because they do not provide the means to determine an aircraft's overall ability to use the National Airspace System (NAS). Often several pieces of equipment are required to obtain a certain capability in the NAS; it thus becomes necessary to study groups of avionics, rather than individual pieces. Therefore, avionics capability groups were developed to provide a framework for the GA fleet relating airborne avionics equipment to aircraft capability to perform in the NAS, and within this framework to analyze the activity and other characteristics of the GA fleet.

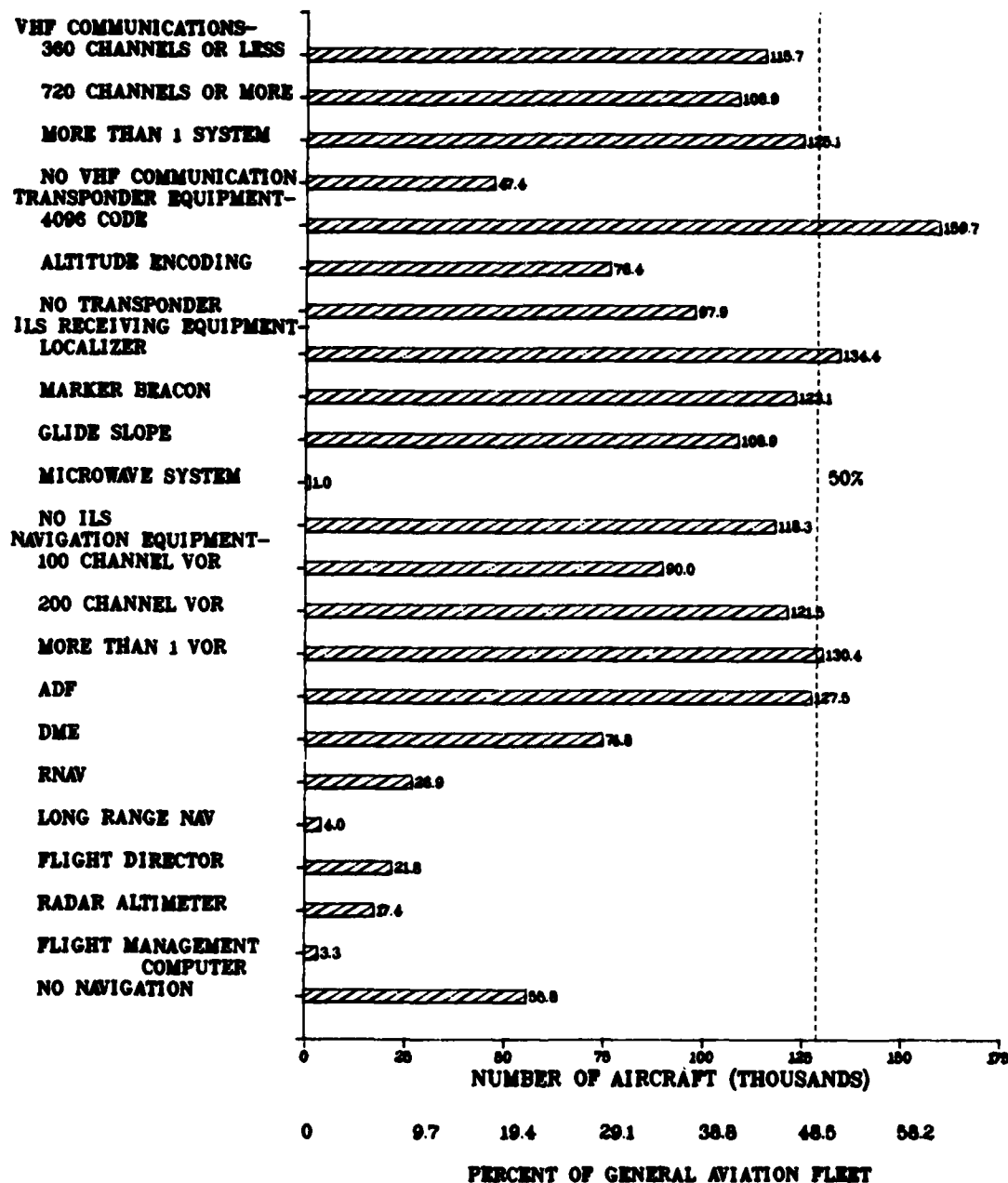


FIGURE 1.10. AVIONICS EQUIPMENT IN THE 1981
GENERAL AVIATION AIRCRAFT FLEET

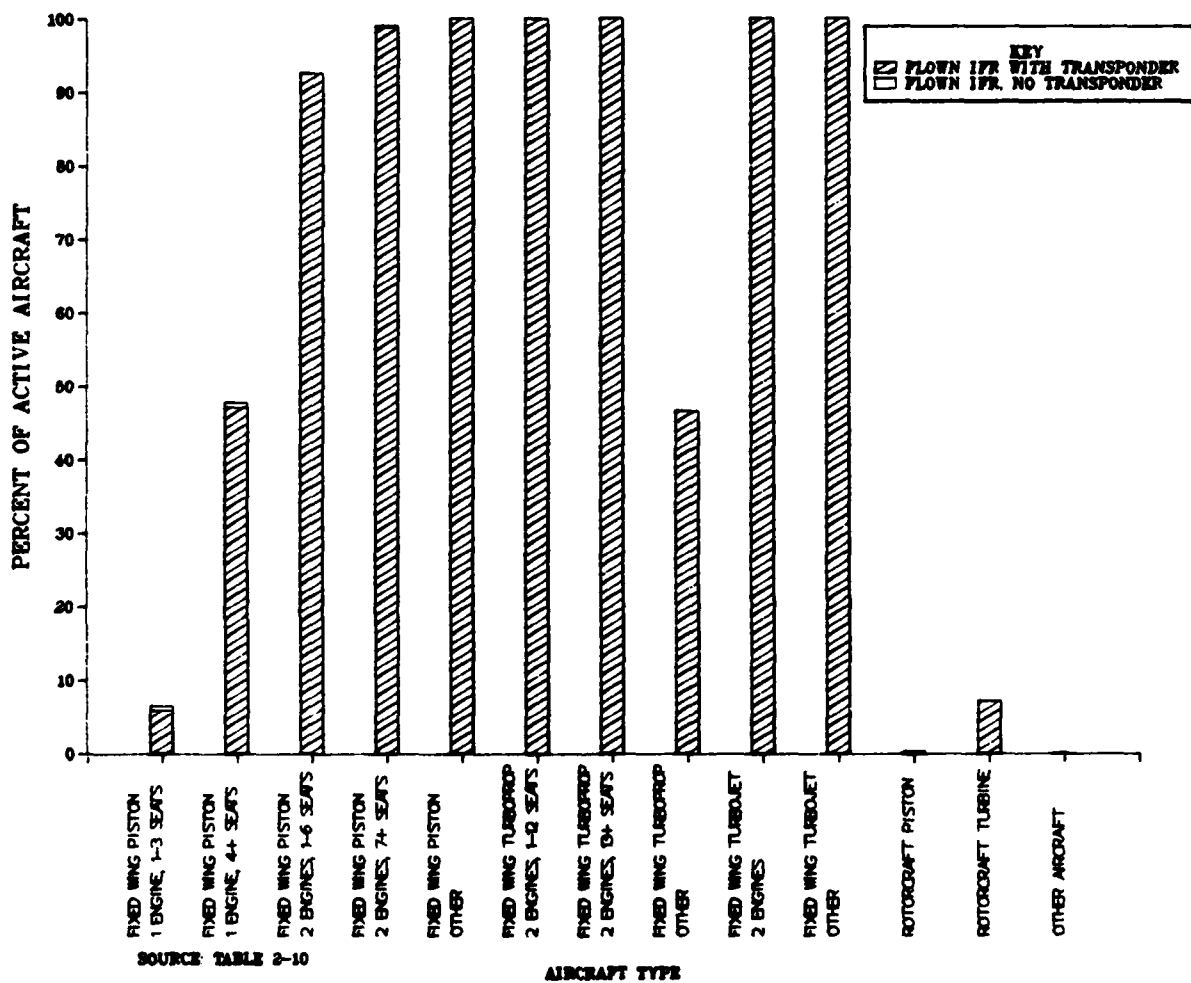


FIGURE 1.11. 1981 GENERAL AVIATION ACTIVE AIRCRAFT FLOWN IFR AND TRANSPONDER EQUIPPED

The methodology and assumptions for developing avionics capability groups are detailed in General Aviation Avionics Statistics.¹ This report also contains a glossary which explains numerous terms relating to avionics equipment and the National Airspace System.

Two classifications of capability groups (CG's) were developed. The first type consists of avionics equipment meeting FAA requirements for use of various aspects of the NAS. FAA regulations deal with three basic capabilities: (1) to fly in different segments of the airspace, (2) to fly under visual flight rules (VFR) and instrument flight rules (IFR) type of flight, and (3) to land at different classes of airports. In the formation of CG's of avionics equipment which relate to these three capabilities, the groups take on a hierarchical nature; that is, there is an order to the groups. Thus, the first type of CG became known as hierarchical. In general, the avionics equipment and the associated capabilities for one capability group are a subset of the avionics equipment and the associated capabilities for the next higher group.

The second type of capability group, non-hierarchical, consists of avionics which give an aircraft additional capability but which are not required equipment according to FAA regulations. The formation of the second type of CG involved grouping component pieces of avionics equipment which together would form a complete avionics system for enabling an aircraft to make full use of a landing, communications, or navigation system in the NAS.

Hierarchical CG's are described in Table 1-4 in terms of avionics equipment and associated capabilities. Non-hierarchical CG's are described in Table 1-5.

¹General Aviation Avionics Statistics (1979 Data), U.S. Department of Transportation, Federal Aviation Administration, (Washington, DC, 1981), pp. 5-10.

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
<p><u>Group 1</u> No regulatory avionics</p>	<ol style="list-style-type: none"> Up to and including 12,500 feet mean sea level (MSL) Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL VFR flight, day and night Uncontrolled airports
<p><u>Group 2</u> Two-way communications</p>	<ol style="list-style-type: none"> Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VFR flight, day and night Non-TCA controlled airports Group III TCA's Helicopters with 4096 code transponders...Group III TCA's All helicopters...Group I and II TCA's below 1,000 feet above ground level (AGL) <p>NOTE: Air taxis with navigation system and transponder: Group II TCA's</p> <p>Air taxis with navigation system, transponder and altitude reporting: Group I TCA's and non-positive controlled airspace</p> <p>Air taxis with navigation system, DME, transponder and altitude reporting: Group I TCA's and positive controlled airspace</p>

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<u>Group 3</u> Two-way communications Two systems--air taxis VOR or Automatic Direction Finder (ADF) or RNAV	<ol style="list-style-type: none"> Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL ADF...Colored airways below 12,500 feet MSL VOR or RNAV...VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL IFR flight Non-TCA controlled airways Group III TCA's Helicopters with 4096 code transponders...Group II TCA's All helicopters...Group I and II TCA's below 1,000 feet AGL
<u>Group 4</u> Two-way communications Two systems--air taxis 4096 code transponder VOR or RNAV	<ol style="list-style-type: none"> Up to and including 12,500 feet MSL Gliders...Up to and including 18,000 feet MSL VOR airways below 12,500 feet MSL RNAV...Low altitude RNAV airways below 12,500 feet MSL IFR flight Non-TCA controlled airports Group II TCA's Helicopters...Group I TCA's below 1,000 feet AGL
<u>Group 5</u> 4096 code transponder Altitude encoding equipment	<ol style="list-style-type: none"> Non-positive controlled airspace VFR flight, day and night Uncontrolled airports Group III TCA's

TABLE 1-4. HIERARCHICAL CAPABILITY GROUPS (CONTINUED)

AVIONICS	CAPABILITIES
<u>Group 6</u> Two-way communications 4096 code transponder Altitude encoding equipment	1. Non-positive controlled airspace 2. VFR flight, day and night 3. Non-TCA controlled airports Group III TCA's Helicopters...Group I TCA's
<u>Group 7</u> Two-way communications Two systems--air taxis 4096 code transponder Altitude encoding equipment VOR	1. Non-positive controlled airspace VOR airways 2. IFR flight 3. Group I TCA's
<u>Group 8</u> Two-way communications Two systems--air taxis 4096 code transponder Altitude encoding equipment VOR or RNAV DME	1. Positive controlled airspace Jet routes RNAV...RNAV routes 2. IFR flight 3. Group I TCA's

TABLE 1-5. NON-HIERARCHICAL CAPABILITY GROUPS

AVIONICS	CAPABILITIES
<u>Group 1</u> Localizer	Partial use of airport ILS
<u>Group 2</u> Localizer Marker Beacon	Partial use of airport ILS
<u>Group 3</u> Localizer Marker Beacon Glide Slope	Full use of airport ILS
<u>Group 4</u> ILS Radar Altimeter	Landing approach in Category III ¹ weather conditions at airports with Category III equipment
<u>Group 5</u> Long Range RNAV	Area navigation over long distances and large bodies of water
<u>Group 6</u> Radar Altimeter	Determination of altitude above level of terrain
<u>Group 7</u> Microwave Landing System (MLS)	More accurate and flexible landing approaches, especially at air- ports with mountains and large buildings nearby
<u>Group 8</u> ILS MLS	Backup landing systems
<u>Group 9</u> Long Range RNAV MLS	Sophisticated navigational and landing capabilities

¹ See Appendix D, "Weather Category Definitions," General Aviation Avionics Statistics (1979 Data), (Washington, DC, 1981).

Table 2-19 presents the estimates of the number of GA aircraft found in the hierarchical and non-hierarchical CG's. Examination of Table 2-19 reveals the following on the GA fleet.

- a. About 23 percent of GA aircraft have avionics equipment enabling them to fly above 18,000 feet in positive controlled airspace. Approximately 70 percent of the GA fleet cannot fly above 12,500 feet due to avionics limitations alone.
- b. About 76 percent of GA aircraft are equipped to fly IFR.
- c. Eighteen percent of the GA fleet are limited to landing at uncontrolled airports. Approximately 22 percent can land at either uncontrolled airports or Group III TCA's. Approximately 31 percent can land at any type of airport except a Group I TCA. About 29 percent can land at Group I TCA's. This proportion has increased constantly over the past 5 years.
- d. In general, Table 2-19 indicates that those aircraft in the least sophisticated non-hierarchical CG's also comprise the bulk of the least sophisticated hierarchical CG's. Of the aircraft possessing none of the non-hierarchical CG equipment (i.e., NO GROUP) 75.6 percent fall into hierarchical CG's 1, 2, and 3. Similarly, those aircraft in the most sophisticated non-hierarchical CG's are also in the most sophisticated hierarchical CG's. For example, 93.9 percent of the aircraft possessing a complete ILS and a radar altimeter fall into hierarchical CG 8.

Tables 2-20 through 2-29 show a distribution of hierarchical and non-hierarchical capability groups versus aircraft characteristics. These characteristics include: primary use of the aircraft, hours flown during 1981, age of the aircraft, and computed aircraft type. The 13 computed aircraft types listed in Table 1-6 combine the four aircraft characteristics of engine type, number of engines, aircraft type (simple), and number of seats into meaningful combinations for the GA fleet.

TABLE 1-6. COMPUTED AIRCRAFT TYPE

TYPE	DESCRIPTION
1.	Fixed wing single engine piston 1-3 seats
2.	Fixed wing single engine piston 4+ seats
3.	Fixed wing two engine piston 1-6 seats
4.	Fixed wing two engine piston 7+ seats
5.	Fixed wing piston other
6.	Fixed wing two engine turboprop 1-12 seats
7.	Fixed wing two engine turboprop 13+ seats
8.	Fixed wing turboprop other
9.	Fixed wing two engine turbojet
10.	Fixed wing turbojet other
11.	Rotorcraft piston
12.	Rotorcraft turbine
13.	Other aircraft

Generally, those aircraft in low order CG's have less sophisticated characteristics than those in high order capability groups as follows:

- a. As in prior years, as the hierarchical CG's increased in sophistication, the predominant uses also grew in sophistication from personal, to business and personal, to executive and business (Table 2-20).
- b. As non-hierarchical CG's increase in sophistication, the predominant primary uses of aircraft change from personal, to business, to business and executive. For example, executive aircraft alone compose 33 percent of the aircraft reporting both a microwave landing system and a complete ILS and about 46 percent of the aircraft reporting a complete ILS and radar altimeter, yet executive aircraft compose only 7.4 percent of the fleet (Table 2-25).
- c. In the case of both hierarchical and non-hierarchical capability groups, aircraft containing more avionics equipment and capabilities are flown more hours on the average than those with smaller investments in avionics equipment (Tables 2-21 and 2-26).
- d. Aircraft in the more sophisticated groups contain newer aircraft on the average than less sophisticated CG's (Tables 2-22 and 2-27).
- e. Computed aircraft type increases in sophistication as the level of avionics increases. This relationship also holds for the four characteristics which are combined to form computed aircraft type: simple aircraft type, engine type, number of engines, and number of seats (Tables 2-23 and 2-28).

1.4.6 Other Results

Additional results to those discussed above are found in the tables in Section 2. Estimates of total hours, mean hours, lifetime airframe hours, and number of active aircraft for over 300 SDR manufacturer/model groups of general aviation aircraft are found in Tables 2-5, 2-11, and 2-16. Appendix D contains definitions of these groups. The report also includes a table on mean hours and number of active engines for 88 different manufacturer/model groups of engines. Appendix E contains definitions of these groups.

2. TABLES OF RESULTS

TABLE 2-1 GENERAL AVIATION TOTAL HOURS FLOWN BY TYPE OF AIRCRAFT - CY 1981 (1 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
FIXED WING									
FIXED WING - PISTON									
1 ENG: 1-3 SEATS	83780	59914	748	10185838	393299	3.9	171.4	6.6	3.8
1 ENG: 4+ SEATS	119910	107983	656	17506247	432043	2.5	162.8	3.9	2.4
1 ENGINE: TOTAL	203690	167898	995	27692086	588304	2.1	165.6	3.4	2.1
2 ENG: 1-6 SEATS	18715	16749	246	3606360	143572	4.0	215.3	8.1	3.7
2 ENG: 7+ SEATS	10138	8607	181	2762506	152596	5.5	325.8	17.0	5.2
2 ENGINE: TOTAL	28853	25356	306	6368867	209520	3.3	251.1	7.7	3.1
PISTON: OTHER	341	114	29	24705	6256	25.3	197.0	3.5	1.8
PISTON: TOTAL	232864	193370	1042	34085659	624531	1.8	175.4	3.2	1.8
FIXED WING - TURBOPROP									
2 ENG: 1-12 SEATS	4099	3968	46	1549528	67905	4.4	397.9	17.8	4.5
2 ENG: 13+ SEATS	601	557	17	542451	45212	8.3	988.9	76.2	7.7
2 ENGINE: TOTAL	4700	4525	49	2091980	81579	3.9	469.4	13.2	3.9
TURBOPROP: OTHER	177	134	5	62546	11176	17.9	498.8	92.4	18.5
TURBOPROP: TOTAL	4877	4660	49	2154526	82341	3.8	470.1	17.9	3.8
FIXED WING - TURBOJET									
2 ENGINE TURBOJET	3083	2808	68	1238071	47786	3.9	442.6	13.6	3.1
TURBOJET: OTHER	620	362	23	149315	15864	10.6	376.5	22.7	6.0
TURBOJET: TOTAL	3703	3171	72	1387387	50351	3.6	436.3	12.5	2.9
FIXED WING: TOTAL	241464	201201	1045	37627572	631945	1.7	184.4	3.1	1.7
MOTORCRAFT PISTON	5437	3250	173	930488	108315	11.6	285.3	29.3	13.3

TABLE 2-1 GENERAL AVIATION TOTAL HOURS FLOWN BY TYPE OF AIRCRAFT - CY 1981 (2 of 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF NUMBER ACTIVE	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
TURBINE	4047	3724	76	1754422	149660	8.5	489.5	42.0	8.7
WINGCRAFT: TOTAL	9484	6974	189	2684911	184906	6.9	390.8	26.2	6.7
OTHER	6738	5049	179	391287	33770	8.6	78.4	6.3	8.1
TOTAL	257686	213226	1078	40703768	659307	1.6	188.1	3.1	1.6

TABLE 2-2 GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT - CY 1981 (1 OF 3)

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALABAMA	2980	398	432644	82566
ALASKA	6450	533	1165501	158122
ARIZONA	4976	510	672923	135333
ARKANSAS	2486	350	518615	106619
CALIFORNIA	30873	1179	5203514	388475
COLORADO	5498	537	1090730	187402
CONNECTICUT	1686	301	310655	83277
DELAWARE	549	164	69604	31345
DC	54	34	14136	11428
FLORIDA	12863	795	3281685	346039
GEORGIA	4477	483	1116526	198275
HAWAII	623	181	287733	131097
IDAH0	2349	358	393569	90454
ILLINOIS	8692	670	1520034	195310
INDIANA	4285	476	712716	120190
IOWA	3747	446	619788	104052
KANSAS	3932	458	619722	117737
KENTUCKY	1687	295	359735	106691
LOUISIANA	3908	437	1551983	248117
MAINE	1156	247	123162	42825
MARYLAND	2645	380	359009	75004

TABLE 2-2 GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT - CY 1981 (2 OF 3)

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
MASSACHUSETTS	2409	362	380537	84820
MICHIGAN	7430	619	1189826	177911
MINNESOTA	5417	532	737271	106603
MISSISSIPPI	2132	335	412326	93136
MISSOURI	4465	491	706381	116655
MONTANA	2463	379	307459	66595
NEBRASKA	2343	350	420276	102830
NEVADA	1520	267	294695	72546
NEW HAMPSHIRE	1202	258	338137	115811
NEW JERSEY	3659	443	693587	133532
NEW MEXICO	2247	344	502203	109397
NEW YORK	5687	541	913787	126748
NORTH CAROLINA	4300	474	1003422	169142
NORTH DAKOTA	1709	305	237151	53402
OHIO	6406	657	1509041	243654
OKLAHOMA	5165	524	861792	131448
OREGON	5640	533	1022241	159535
PENNSYLVANIA	5666	530	993913	153496
RHODE ISLAND	320	127	43441	22034
SOUTH CAROLINA	1870	320	364841	67183
SOUTH DAKOTA	1125	242	155066	51273
TENNESSEE	2730	335	749425	177207
TEXAS	19481	952	3752575	267325
UTAH	1506	289	261936	72003
VERMONT	447	151	63067	26481
VIRGINIA	2784	362	606047	142020

TABLE 2-2 GENERAL AVIATION TOTAL HOURS FLOWN BY STATE OF BASED AIRCRAFT - CY 1981 (3 OF 3)

STATE	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
WASHINGTON	6048	552	930101	139219
WEST VIRGINIA	942	220	182050	62197
WISCONSIN	4432	462	868748	161623
WYOMING	1142	246	250154	98021
PUERTO RICO	124	69	38252	15777
OTHER U.S. TERRITORIES	54	54	15129	16087
FOREIGN	594	151	200885	78488
TOTAL	213226	1078	40703768	659307

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-3 GENERAL AVIATION TOTAL HOURS FLOWN BY REGION OF BASED AIRCRAFT - CY 1981

REGION	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF TOTAL HOURS	STANDARD ERROR
ALASKAN	6450	533	1165501	158122
CENTRAL	14489	858	2372818	210567
EASTERN	21988	1023	3858235	276764
EUROPEAN OFFICE	214	70	54342	19156
GREAT LAKES	41498	1355	6938052	394877
NEW ENGLAND	7224	615	1263638	162378
NORTHWEST MT.	24708	1084	4284962	306062
SOUTHERN	33331	1229	7840805	473352
SOUTHWESTERN	33440	1209	7279556	411110
WESTERN-PACIFIC	38074	1287	6693537	424771
TOTAL	213226	1078	40703768	659307

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-4 GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE - CY 1981
(1 OF 3)

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUCTIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	TOTAL
FIXED WING												
FIXED WING - PISTON												
1 ENG: 1-3 SEATS												
EST. TOT. HOURS	37841	349248	2389306	3514405	1842596	424802	117779	0	21361	137533	1075603	10185838
% STD. ERROR	26.9	14.4	5.7	6.9	5.7	28.5	28.3	0.0	54.6	21.9	17.5	3.9
1 ENG: 4+ SEATS												
EST. TOT. HOURS	891579	5052391	5252145	1761607	140797	491212	74666	130285	1084774	171552	2518642	17536247
% STD. ERROR	15.2	4.9	3.4	12.2	40.3	25.7	42.3	47.6	14.9	25.5	10.6	2.5
1 ENGINE: TOTAL												
EST. TOT. HOURS	1268371	5405829	7665278	5264447	1986631	917000	193247	130285	1107157	308426	3588810	27692086
% STD. ERROR	13.3	4.7	2.9	7.2	5.7	18.9	23.5	47.6	13.7	16.8	9.1	2.1
2 ENG: 1-6 SEATS												
EST. TOT. HOURS	997124	1345638	212016	142752	575	127449	0	48278	605291	75993	41352	3606360
% STD. ERROR	11.0	7.3	16.3	20.6	98.8	36.6	0.0	61.3	16.2	31.3	39.1	4.3
2 ENG: 7+ SEATS												
EST. TOT. HOURS	1064061	534081	102226	21444	55274	46336	13034	423447	484442	60212	10272	2762536
% STD. ERROR	11.6	13.1	27.0	89.9	33.3	53.6	120.2	24.3	17.3	31.7	90.6	5.5
2 ENGINE: TOTAL												
EST. TOT. HOURS	2054608	1876562	304612	164343	55603	169647	13034	405638	1091357	136145	51527	6368867
% STD. ERROR	8.0	6.4	13.6	25.3	31.7	31.2	120.2	22.8	11.8	22.4	35.7	3.3
PISTON: OTHER												
EST. TOT. HOURS	3931	83	851	0	6718	221	0	0	2243	2069	8479	24735
% STD. ERROR	22.0	362.2	43.9	0.0	16.5	44.6	0.0	0.0	49.4	22.3	51.0	25.3
PISTON: TOTAL												
EST. TOT. HOURS	3276502	7245372	7959992	5440634	2060388	1089341	204904	596325	2196068	438294	3657215	34386659
% STD. ERROR	7.4	3.9	2.8	7.0	5.7	16.8	23.0	20.5	9.1	13.7	8.9	1.8
FIXED WING - TURBOPROP												
2 ENG: 1-12 SEATS												
EST. TOT. HOURS	924008	422805	17086	1125	0	2626	0	0	155700	42321	9804	1549528
% STD. ERROR	7.6	17.6	68.8	118.1	0.0	159.9	0.0	0.0	23.5	33.8	73.0	4.4

TABLE 2-4 GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE - CY 1981
(2 OF 3)

AIRCRAFT TYPE	EXECU- TIVE	BUSI- NESS	PERSO- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	UTHER WORK	COMPUTER CARRIER	AIK TAKE	UTHER	RENTAL	TOTAL
2 ENG: 13+ SEATS												
EST.TOT.HOURS	128540	23076	0	806	0	0	0	369522	14428	10516	3846	542451
% STD. ERROR	19.9	45.4	0.0	125.8	0.0	0.0	0.0	11.9	64.8	55.3	151.6	8.3
2 ENGINE: TOTAL												
EST.TOT.HOURS	1050323	445778	17086	1806	0	2626	0	369522	170235	52867	13747	2091980
% STD. ERROR	7.2	17.0	68.8	84.3	0.0	159.9	0.0	11.9	22.4	29.4	67.8	3.9
TURBOPROP: OTHER												
EST.TOT.HOURS	2981	6182	1361	0	40505	0	0	0	8465	2293	1331	62546
% STD. ERROR	33.8	41.4	44.2	0.0	27.9	0.0	0.0	0.0	11.8	33.8	31.4	17.9
TURBOPROP: TOTAL												
EST.TOT.HOURS	1053599	451495	18891	1806	40505	2626	0	369522	178471	55369	15775	2154526
% STD. ERROR	7.1	16.9	60.1	84.3	27.9	159.9	0.0	11.9	21.7	27.4	55.5	3.8
FIXED WING - TURBOJET												
2 ENGINE TURBOJET												
EST.TOT.HOURS	904923	225894	843	0	0	5259	3116	810	68313	35362	0	1238071
% STD. ERROR	5.2	15.6	127.2	0.0	0.0	123.5	207.7	116.2	34.0	37.8	0.0	3.9
TURBOJET: OTHER												
EST.TOT.HOURS	86643	14113	115	0	0	0	0	0	0	12044	21973	149315
% STD. ERROR	11.2	59.5	43.6	0.0	0.0	0.0	0.0	0.0	0.0	18.3	33.2	10.6
TURBOJET: TOTAL												
EST.TOT.HOURS	994107	241001	965	0	0	5259	3116	810	68313	50176	21973	1387387
% STD. ERROR	4.8	15.5	56.1	0.0	0.0	123.5	207.7	116.2	34.0	16.3	33.2	3.6
FIXED WING: TOTAL												
EST.TOT.HOURS	5260589	7857257	7978749	5433483	2099477	1096709	206988	967492	2436819	532923	3688721	37627572
% STD. ERROR	5.2	3.7	2.8	7.0	5.6	16.7	22.9	5.5	8.5	12.1	8.9	1.7
ROTORCRAFT												
PISTON												
EST.TOT.HOURS	121439	90020	26514	69960	308883	160041	18065	0	52099	84284	465	930488
% STD. ERROR	43.3	41.2	23.4	32.8	16.2	38.7	55.5	0.0	59.7	36.9	204.1	11.6
TURBINE												
EST.TOT.HOURS	915533	189136	8708	10547	33621	145118	144253	9672	320369	122295	3553	1754422
% STD. ERROR	19.5	36.4	57.5	89.5	26.5	46.1	28.8	104.7	24.1	26.3	108.8	6.5

TABLE 2-4 GENERAL AVIATION TOTAL HOURS FLOWN BY AIRCRAFT TYPE AND PRIMARY USE - CY 1981
(3 OF 3)

AIRCRAFT TYPE	EXECUTIVE	BUSINESS	PERSONAL	INSTRUMENTAL	AERIAL APPL	AERIAL OBS	UTHER WORK	COMPUTER CARRIER	AIR TAXI	UTHER	RENTAL	TOTAL
MOTORCRAFT: TOTAL												
EST. TOT. HOURS	936548	278517	33847	79772	346866	295841	159960	9672	372491	205827	4062	2684911
% STD. ERROR	17.9	27.7	21.0	32.4	14.9	28.7	25.0	104.7	22.4	21.6	104.0	6.9
OTHER												
EST. TOT. HOURS	13224	6275	208282	58462	0	4985	12890	0	3234	31428	56778	391287
% STD. ERROR	44.4	53.1	8.8	37.3	0.0	50.7	32.3	0.0	95.7	24.2	34.1	8.6
TOTAL												
EST. TOT. HOURS	6189787	8122340	8241233	5596798	2447166	1401905	368608	978741	2808784	769407	3768116	40733768
% STD. ERROR	4.0	3.0	2.4	4.8	4.9	11.4	12.5	7.7	4.8	11.1	5.9	1.6

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (1 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
OTHER 01	10252	304068	58798	19.3	58.1	10.6	18.2
OTHER 02	1005	46258	13216	28.6	80.2	20.6	25.7
OTHER 03	437	56725	15445	27.2	185.8	40.0	21.5
OTHER 04	166	5387	6051	112.3	259.6	111.8	43.1
OTHER 05	98	6173	1278	20.7	197.7	30.1	15.2
OTHER 06	155	49403	7438	15.1	360.5	40.4	11.2
OTHER 07	119	88552	24118	27.2	949.2	223.0	23.5
OTHER 08	81	15119	2965	19.6	309.0	51.0	16.5
OTHER 09	451	106527	24770	23.3	321.6	54.6	17.0
OTHER 10	160	22477	6121	27.2	241.6	63.4	26.2
OTHER 11	1718	37280	17342	46.5	89.0	34.5	38.8
OTHER 12	223	48355	16686	34.5	367.7	80.4	21.9
OTHER 13	1904	66693	13013	19.5	60.8	9.3	15.3
ADAMS A50S	50	2031	427	21.0	45.7	6.9	15.1
AEROSJ2	37	189	129	68.1	21.1	8.2	38.8
AEROSPAS355	61	1179	2516	213.4	19.3	41.2	213.4
AERUSPSA316	133	90435	17707	19.6	714.5	129.1	18.1
AERUSPSA341	62	13935	3114	22.3	313.3	41.2	13.2
AGUSTA205	59	28939	2147	7.4	592.5	33.6	5.7
AGUSTAA109	23	4509	2387	52.9	392.1	60.9	15.5
AIRPTSA	271	35238	11584	32.9	203.5	56.4	27.7

NOTE: SEE PAGE 2-41 FOR CODING.

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (2 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
AIRSPC18	23	90	49	54.2	7.8	3.5	45.1
AIRTRCAT300	320	116952	17593	15.0	439.9	44.2	10.0
AMD FALC10	123	47180	8232	17.4	469.9	47.9	10.2
AMD FALC20	234	98061	11424	11.6	485.5	32.2	6.6
AMD FALC50	46	7731	5992	77.5	448.2	67.1	15.0
AMTR TMK	28	683	419	61.3	40.7	18.9	46.4
AKCRNEH37	46	0	0	0.0	0.0	0.0	0.0
ARCTICS1A	91	991	612	61.8	49.0	13.9	28.3
ARCTICS1B1	24	493	96	19.5	42.9	5.0	11.7
ARUNCA15	196	4105	2247	54.7	33.9	16.8	49.4
ARONCA65	149	2848	940	33.0	46.2	10.7	23.1
ARONCAC3	56	207	46	22.4	15.7	2.4	15.4
ARUNCAU58	158	4781	2429	50.8	57.4	25.6	44.5
AVIANWFALCON	26	464	166	35.8	21.4	5.7	26.7
AVIANWSKYHMK	24	991	205	20.7	41.3	8.5	20.7
AYRES S2	931	326155	38636	11.8	410.0	35.4	8.6
BAC 111	31	13729	2067	15.1	442.9	66.7	15.1
BAG B206	35	5191	2592	49.9	161.3	76.2	47.3
BAG DH125	53	23232	3074	13.2	438.3	58.0	13.2
BALWKSPIREFY	813	53329	9988	18.7	76.2	12.9	16.9
BEECH 100	266	146528	19339	13.2	550.9	72.7	13.2

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (3 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BEECH 17	190	3882	1806	46.5	51.6	10.3	19.9
BEECH 18	1002	171347	53692	31.3	312.2	81.3	26.0
BEECH 200	634	315399	40280	12.8	497.3	63.5	12.8
BEECH 23	2893	467731	59332	12.7	171.8	21.2	12.3
BEECH 33	1617	197839	18564	9.4	126.0	11.5	9.1
BEECH 35	6960	774756	51702	6.7	117.3	7.5	6.4
BEECH 36	1650	321234	30664	9.5	190.1	18.1	9.5
BEECH 45	306	32240	6865	21.3	138.0	24.1	17.5
BEECH 50	345	14116	6285	44.5	58.8	22.2	37.7
BEECH 55	2253	397717	46068	11.6	186.8	20.7	11.1
BEECH 56	65	7554	1268	16.8	123.8	18.8	15.2
BEECH 58	1296	343649	26649	7.8	266.2	20.5	7.7
BEECH 60	405	77042	11524	15.0	190.2	28.5	15.0
BEECH 65	160	27546	6371	23.1	232.4	44.3	19.1
BEECH 76	294	62633	14045	22.4	215.3	47.8	22.2
BEECH 77	227	76414	12618	16.5	339.3	55.3	16.3
BEECH 80	223	44457	15445	34.7	271.7	74.4	27.4
BEECH 90	1052	386962	36447	9.4	377.9	34.0	9.0
BEECH 95	487	82476	21919	26.6	171.0	45.2	26.4
BEECH 99	49	68787	12555	18.3	1494.4	232.2	15.5
BELL 204	142	18733	6304	33.7	158.8	49.9	31.4

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (4 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BELL 206	1971	1079517	138112	12.8	564.1	70.5	12.5
BELL 212	144	29309	11779	40.2	254.4	80.8	31.8
BELL 222	39	11815	3054	25.8	302.9	78.3	25.8
BELL 412	21	6510	0	0.0	310.0	0.0	0.0
BELL 47	1488	394871	71060	18.0	318.6	52.0	16.3
BLANCA11	958	24457	4663	19.1	45.0	6.9	15.3
BLANCA1413	292	2868	1724	60.1	34.6	9.6	27.8
BLANCA1419	298	15252	5213	34.2	80.0	17.3	21.6
BLANCA17	1084	124153	21672	17.5	121.0	20.4	16.9
BLANCA7	6047	448721	102871	22.9	109.0	24.2	22.2
BLANCA8	740	81747	17079	20.9	115.3	23.5	20.4
BNORM BN2	95	60272	10700	17.8	758.9	116.4	15.3
BOEING707	55	23816	8332	35.0	930.9	264.4	28.4
BOEING720	19	765	577	75.4	169.0	88.3	52.3
BOEING727	61	13970	6844	49.0	345.0	106.0	30.7
BOEING737	15	9756	2965	30.4	650.4	197.7	30.4
BOEING747	22	19888	0	0.0	904.0	0.0	0.0
BOEING75	1923	32736	10554	32.2	50.6	13.1	25.9
BOLAMS105	70	40462	7430	18.4	578.0	106.1	18.4
BAEERODH125	151	60959	7056	11.6	406.4	47.0	11.6
BRASOVIS28	55	5158	1338	25.9	98.0	24.8	25.3

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (5 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BRWSTRFLEET2	29	552	137	24.9	39.5	7.2	18.2
BRWSTRFLEET7	22	170	112	66.1	29.0	9.1	31.2
BUKER 131	30	370	137	36.9	57.0	8.0	14.0
CAMRONMODELO	123	7290	1808	24.8	60.7	14.7	24.3
CESSNA120	898	45637	14862	32.6	58.1	18.3	31.5
CESSNA140	2447	104470	16797	16.1	59.5	8.6	14.5
CESSNA150	20070	4630082	321405	6.9	262.0	17.4	6.7
CESSNA170	2483	268454	98081	36.5	128.9	46.4	36.0
CESSNA172	24973	4546301	289504	6.4	198.3	12.3	6.2
CESSNA175	1397	71204	16866	23.7	59.1	13.3	22.4
CESSNA177	2983	332700	31827	9.6	120.8	10.9	9.1
CESSNA180	2759	351689	49668	14.1	140.8	19.1	13.5
CESSNA182	13678	1740841	96881	5.6	139.2	7.3	5.2
CESSNA185	1536	257646	47348	18.4	187.8	32.3	17.2
CESSNA188	1912	449758	50613	11.3	268.4	25.6	9.5
CESSNA190	84	1870	502	26.8	39.0	5.2	13.5
CESSNA195	495	21267	3976	18.7	71.0	10.6	14.9
CESSNA206	3022	565631	75796	13.4	201.2	26.1	13.0
CESSNA207	399	214933	40665	18.9	653.0	75.2	11.5
CESSNA210	6411	1058755	82121	7.8	175.7	13.0	7.4
CESSNA305	257	28647	3582	12.5	119.8	14.0	11.7

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (6 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CESSNA310	3321	681965	81266	11.9	241.4	26.3	10.9
CESSNA320	358	50389	12764	25.3	160.9	37.0	23.0
CESSNA335	54	19554	3196	16.3	373.7	59.6	15.9
CESSNA336	98	8931	3231	36.2	97.5	34.0	34.9
CESSNA337	1322	207282	29860	14.4	176.1	23.3	13.2
CESSNA340	910	189272	23158	12.2	208.0	25.4	12.2
CESSNA401	257	77327	11292	14.6	306.3	43.0	14.0
CESSNA402	742	352525	65681	18.6	517.0	90.9	17.6
CESSNA404	176	90499	18266	20.2	611.9	92.9	15.2
CESSNA411	190	26576	8243	31.0	148.3	43.6	29.4
CESSNA414	743	161362	25806	16.0	235.6	33.2	14.1
CESSNA421	1296	329281	37754	11.5	290.4	28.0	9.6
CESSNA425	65	11658	2267	19.5	189.6	35.5	18.7
CESSNA441	174	56994	7795	13.7	339.0	43.0	12.7
CESSNA500	439	193786	21367	11.0	470.8	44.1	9.4
CESSNA500	79	176	165	93.8	25.3	4.3	16.9
CESSNAUC94	35	387	71	18.3	32.2	3.2	9.9
CHILD S2	127	6380	1398	21.9	50.7	11.0	21.7
CUMMINS105	106	1743	596	34.2	32.9	8.3	25.1
CUMMINS144	479	32219	7324	22.7	75.3	16.1	21.4
CURTISC46	43	3178	1710	53.8	171.8	78.4	45.6

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (7 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
CURTISJR	21	48	13	28.0	14.5	1.7	11.7
CURTISKUBIN	35	84	41	49.1	12.0	3.8	31.9
CURTISTKVAIK	183	8962	5964	66.5	124.6	69.0	55.3
CVAC 22	18	466	365	78.2	129.5	65.6	50.7
CVAC 240	54	834	326	39.2	66.6	16.6	25.0
CVAC 340	23	3135	1663	53.1	289.6	59.9	20.7
CVAC BT13	93	266	133	50.1	15.5	1.7	11.0
CVAC L13	22	28	29	105.5	10.0	0.0	0.0
CVAC STC580	34	16313	6287	38.5	479.8	184.9	38.5
DART G	26	85	31	37.6	16.5	3.1	18.7
DHAV DHC1	68	3552	756	21.3	54.7	9.1	16.6
DHAV DHC2	320	64144	16345	25.5	297.8	70.0	23.5
DHAV DHC6	118	133541	27225	20.4	1142.7	230.4	20.2
DHAVXKH82	89	2303	683	29.6	65.3	13.2	20.2
DOUG A26	62	517	155	30.0	22.1	5.3	24.1
DOUG DC3	462	42787	36286	84.8	130.4	105.3	80.8
DOUG DC4	84	4145	1392	33.6	126.0	8.3	6.6
DOUG DC6	116	3604	3508	97.3	134.8	13.3	9.9
DOUG DC7	43	10784	4824	44.7	447.6	137.2	30.6
DOUG DC8	45	1017	571	56.1	72.9	38.3	52.5
DOUG DC9	25	15781	1571	10.0	631.3	62.8	10.0

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (8 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
BAIRVUN20	109	9503	2269	23.9	94.9	21.0	22.1
BAIR MA1	25	4442	931	20.9	287.4	51.2	17.8
BAIR 110	49	56846	11951	21.0	1160.1	243.9	21.0
BAIRMF28	449	104615	24557	23.5	254.3	59.3	23.3
BAIR 168	25	547	106	19.4	35.0	3.8	10.7
BAIRLD24	303	3959	1484	37.5	44.5	10.9	24.5
BAIRLOC119	34	5518	3357	60.8	162.3	98.7	60.8
BAIRLDF27	30	8907	1426	16.0	352.6	29.7	8.4
BAIRLDM62	233	2884	1162	40.3	27.1	8.5	31.4
BAIRALAX6	49	2929	480	16.4	73.0	8.9	12.2
BAIRFLLIBELL	158	21660	6588	30.4	147.6	41.3	27.9
BAIR ASTIR	60	3661	732	20.0	62.2	12.3	19.8
BAIRLAS2T1	183	10131	3589	35.4	81.2	25.2	31.1
BAIRMANTBH	36	1046	413	39.5	76.8	13.8	17.9
BAIRMAVAAL	631	145996	49424	33.9	237.2	79.9	33.7
BAIRMAVAAS	1100	146487	18481	12.6	133.2	16.8	12.6
BAIRMAVG164	614	249359	38347	15.4	448.7	58.6	13.1
BAIRMAVG21	53	6462	2851	44.1	182.9	37.4	20.5
BAIRLSTM112	745	84961	10348	15.9	98.2	14.1	14.3
BAIRLSTM500	336	121204	29572	24.4	376.3	89.5	23.8
BAIRLSTM520	61	885	1047	118.4	69.6	38.9	55.9

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (9 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
GULSTM60C	136	9900	1945	19.6	83.2	12.8	15.4
GULSTM60D	375	91257	35736	39.2	279.5	102.4	36.6
GULSTM60TP	129	28969	6248	21.6	279.2	47.2	16.9
GULSTM60TP	247	85397	8724	10.2	347.6	35.0	10.1
GULSIMAAL	619	47200	9934	21.0	85.3	17.0	20.0
GULSTMAAS	1058	184847	46266	25.0	192.6	46.8	24.3
GULSTMGL159	149	76411	7301	9.6	512.8	49.0	9.6
GULSTMGL59	132	52484	8611	16.4	412.9	62.9	15.2
GULSTMGL44	86	12139	3819	31.5	185.8	54.3	29.2
GULSTMGL73	22	4794	3876	80.9	572.0	237.7	41.6
GULSTMGA7	59	10188	2002	19.6	172.7	33.9	19.6
HELIO H250	22	2658	586	22.0	145.3	28.5	19.6
HELIO H295	105	13816	4099	29.7	168.4	43.2	25.6
HELIO H391	25	1177	306	26.0	75.6	15.8	20.9
HELIO H395	23	2442	329	13.5	129.1	13.6	10.5
MILLERFH1100	71	12707	4752	37.4	179.0	66.9	37.4
MILLERUH12	667	120107	26788	22.3	238.0	47.5	20.3
MUGHES269	698	229950	70932	30.8	479.2	125.7	26.2
MUGHES369	564	208544	48286	23.2	379.0	86.7	22.9
HWKSLYDH104	36	1935	1141	59.0	194.7	65.3	33.6
HWKSLYDH125	31	10370	1628	15.7	390.2	53.9	13.8

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (10 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
HYNES B2	135	5649	887	15.7	80.1	11.0	13.7
ISRAELI121	114	33549	10539	31.4	318.4	94.9	29.8
ISRAELI124	138	47004	8859	18.8	454.1	43.6	9.6
JBMSTRUGA15	82	1729	915	52.9	60.6	20.4	33.7
KUNLUND	269	6284	1883	30.0	60.9	15.9	26.1
LAIRFN10	41	394	116	29.5	26.0	5.6	21.4
LEAR 23	62	23321	4303	18.5	376.1	69.4	18.5
LEAR 24	193	64851	13149	20.3	354.3	67.4	19.0
LEAR 25	237	125736	12515	10.0	530.5	52.8	10.0
LEAR 35	300	136848	13245	9.7	456.2	44.2	9.7
LET L13	175	16207	2738	15.0	121.1	16.6	13.7
LKHEED1329	142	59111	7826	13.2	425.5	53.4	12.6
LKHEED18	81	1097	420	38.2	38.3	4.8	12.4
LKHEEDPV1	60	0	0	0.0	0.0	0.0	0.0
LKHEEDT33	52	73	88	119.8	21.7	3.0	13.7
LUSCOM8	2216	58800	10197	17.3	47.8	7.5	15.7
MARTIN404	28	4	4	125.4	1.0	0.0	0.0
MAULE M4	271	16053	2544	15.8	68.0	10.4	15.3
MAULE M5	425	116377	34007	29.2	289.0	83.1	28.8
MCLISHPUNKB	137	1423	1032	72.6	56.8	26.3	46.2
MEYERSUTW	51	443	219	49.4	26.1	6.0	23.2

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981(11 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
MNCOUP90	71	582	231	39.7	25.8	5.6	21.6
MNMITEMR	147	936	461	49.3	22.9	4.4	19.2
MOUNEYM20	5896	840479	75031	8.9	147.9	12.9	8.8
MKCH11S205	49	1693	180	10.6	41.9	3.9	9.3
MTSBSIMU2	524	172176	21676	12.6	345.1	38.9	11.3
MULTECD16	49	1375	666	48.5	56.1	17.6	31.3
NAMEK B25	53	400	167	41.8	25.8	7.9	30.7
NAMEK F51	150	3320	1891	57.0	70.3	23.7	29.5
NAMEK NA260	69	2097	364	17.3	63.9	9.2	14.4
NAMEK T6	474	30089	8400	27.9	94.8	19.5	20.6
NAVAL N3N	152	1744	564	32.3	45.4	12.1	26.6
NAVIONNAVIUM.	582	27332	4407	16.1	53.8	7.7	14.3
NORD SV4	46	1125	292	26.0	43.0	9.0	20.9
ORLHELH19	37	4995	2207	44.2	270.0	14.7	5.4
PICARDA60	170	5774	1005	17.4	44.2	6.4	14.4
PILATSB4	28	1845	371	20.1	69.8	13.0	18.7
PIPER 600	341	90567	15420	17.1	273.8	45.2	16.5
PIPER J2	66	560	92	16.4	24.8	3.0	11.9
PIPER J3	4263	168135	45559	27.1	67.8	17.6	25.9
PIPER J4	240	5946	4373	73.5	89.7	57.9	64.6
PIPER J5	349	9603	2041	21.3	49.7	7.3	14.7

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (12 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
PIPER PA12	1324	54982	13861	25.2	64.3	14.2	22.1
PIPER PA14	104	5178	1321	25.5	51.1	11.0	21.4
PIPER PA15	190	5906	1816	30.7	56.7	10.7	18.8
PIPER PA16	363	53182	41346	77.7	225.8	171.5	76.0
PIPER PA17	114	2400	799	33.3	41.3	8.2	19.8
PIPER PA18	3446	355029	66252	18.7	135.3	23.2	17.1
PIPER PA20	469	30674	11249	36.7	104.4	33.0	31.6
PIPER PA22	5062	199650	19392	9.7	60.2	4.4	7.3
PIPER PA23	3650	690116	72542	10.5	219.8	20.7	9.4
PIPER PA24	3293	360104	30172	8.4	112.8	9.2	8.2
PIPER PA25	1527	259470	54741	21.1	248.1	44.4	17.9
PIPER PA28	22425	3843372	226981	5.9	182.2	10.5	5.8
PIPER PA30	1300	164656	21585	13.1	127.1	16.6	13.1
PIPER PA31	2030	816424	86977	10.7	424.4	45.4	10.7
PIPER PA31T	499	155380	22019	14.2	311.4	44.1	14.2
PIPER PA32	4250	833925	81813	9.6	207.3	19.7	9.5
PIPER PA34	2052	547237	60137	11.0	270.5	29.4	10.9
PIPER PA36	328	73295	12436	17.0	230.5	37.0	16.1
PIPER PA38	1561	528685	60124	11.4	350.7	38.1	10.9
PIPER PA42	37	14252	2667	18.7	401.3	72.2	18.0
PIPER PA44	324	113102	21762	19.2	359.9	67.8	18.8

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (13 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
PROJET200	95	6253	1560	24.9	70.7	16.5	23.3
RANKING5	55	1017	180	17.7	44.8	6.6	14.7
RAVEN RX6	220	6644	1566	23.6	37.5	7.8	20.7
RAVEN SDC	107	931	570	61.3	22.0	10.3	47.0
RAVEN S55	568	27253	6912	25.4	62.5	13.7	21.9
RAVEN S60	54	1906	336	17.6	41.3	6.1	14.7
RKWEEL500	40	15858	4057	25.6	415.3	104.5	25.2
RKWEEL690TP	61	26253	4415	16.8	478.2	68.0	14.2
RKWEEL700	22	4790	3484	72.7	217.7	158.4	72.7
RKWEELNA265	338	150971	13094	8.7	467.9	34.7	7.4
ROBSINK22	108	29440	6271	21.3	315.1	60.6	19.2
ROLSCHLS	110	6642	845	12.7	60.4	7.7	12.7
RYAN ST3	161	5165	1773	34.3	59.9	8.2	13.7
RYAN STA	33	230	68	29.7	23.4	3.1	13.2
SCHLERAS15	38	2271	381	16.8	62.9	10.1	16.1
SCHLERASW19	55	3608	464	12.9	69.0	8.0	11.6
SCHLERASW20	78	3861	973	25.2	57.1	13.2	23.2
SCHLERKAB	23	784	127	16.1	37.2	5.0	13.4
SCHLERKAB	74	2270	459	20.2	34.8	6.2	17.7
SCWZKRG164	908	329249	44889	13.6	430.9	46.1	10.7
SCWZKRS61	779	40641	16005	39.4	64.5	24.6	38.2

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (14 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
SCWZERSG2	601	83552	22256	26.6	188.9	44.9	23.8
SEMO CLINGER	27	518	99	19.1	33.6	5.2	15.4
SEMO MODEL T	35	139	107	77.0	7.0	5.0	71.9
SKRSKYS55	84	22019	7363	33.4	378.6	87.3	23.1
SKRSKYS56	68	7378	2442	33.1	194.3	38.2	19.6
SKRSKYS58T	21	14300	1814	12.7	680.9	86.4	12.7
SKRSKYS76	53	36036	6288	17.4	679.9	118.6	17.4
SLINDS100	339	18408	4291	23.3	60.3	13.0	21.6
SMITH 600	198	62567	18124	29.0	333.5	94.9	28.4
SNIAS 350	208	66218	6842	10.3	379.4	34.3	9.0
SNIAS SA318	34	11858	617	5.2	348.8	18.1	5.2
SOCATA MS894	42	4029	544	13.5	100.1	12.7	12.7
SOCATA HALLEY	43	5205	1159	22.3	121.0	27.0	22.3
SPRINTCIRKUS	106	5037	1786	35.5	59.7	19.7	33.1
SPRINTNIMBUS	39	3690	386	10.5	94.6	9.9	10.5
STBRSSD3	29	50867	12963	25.5	2017.1	337.7	16.7
SINSON10	173	4836	1837	38.0	72.8	19.8	27.2
SINSONL5	133	1359	664	48.8	21.1	8.1	38.4
SINSUNSK9	26	43	19	43.1	14.3	4.2	29.4
SINSONV77	106	642	298	46.5	22.1	5.6	25.3
STOLARC3	236	3978	2540	63.9	35.4	19.3	54.4

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (15 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
SUPAC LA	104	968	358	37.0	22.0	5.9	27.0
SUPAC V	28	362	112	30.9	22.0	5.5	25.1
SWKNGNSA226	167	126227	13810	10.9	740.8	80.0	10.8
SWKNGNSA20	104	35275	3031	8.6	349.0	22.0	6.3
TCRAFTA	29	32	7	22.3	10.3	0.1	1.0
TCRAFTBC	1883	58281	19963	34.3	67.3	20.9	31.0
TCRAFTBF	43	472	98	20.7	33.3	4.8	14.6
TCRAFTBL	225	3506	1350	38.5	39.3	12.2	30.9
TEMCO 11A	31	710	207	29.1	38.2	7.7	20.1
THUNDERAK7	39	1610	519	32.3	44.1	13.6	30.8
TMPSUNNAVIUM	348	12092	4861	40.2	72.2	17.0	23.5
TOMCAT476ELL	27	4971	1537	30.9	299.2	47.6	15.9
TRYTEKA	31	164	93	56.6	42.3	9.5	22.4
UNIVACGC1	670	28068	8826	31.4	69.0	17.5	25.4
UNIVAK106	2173	78694	15378	19.5	56.5	9.3	16.5
UNIVAK415	2488	96716	22644	23.4	59.4	12.8	21.5
VARGA 2150	135	7248	1904	26.3	56.2	14.4	25.7
VICKER745	22	2834	781	27.6	209.3	42.3	20.2
WACO ASD	30	364	137	37.8	29.7	8.2	27.5
WACU GAE	35	240	60	25.0	33.2	6.5	19.6
WACU R	32	318	121	38.1	23.5	6.6	28.2

TABLE 2-5 GENERAL AVIATION ANNUAL HOURS FLOWN BY SDR AIRCRAFT MANUFACTURER
MODEL GROUP CY 1981 (16 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF TOTAL HOURS	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF MEAN HOURS	STANDARD ERROR	PERCENT STANDARD ERROR
WACO U	29	221	50	22.6	36.5	5.9	16.1
WACO UPF7	158	6583	2732	41.5	100.7	35.3	35.1
WACO YK	54	338	97	28.6	36.3	6.5	17.9
WAGNER65	347	5817	520	8.9	47.1	3.4	7.3
WTHRLY201	75	14535	1942	13.4	251.7	25.0	9.9
TOTAL	257686	40703768	659307	1.6	188.1	3.1	1.63

TABLE 2-6 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT - CY 1981 (1 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
FIXED WING						
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	83780	59914	748	1.2	71.5	3.9
1 ENG: 4+ SEATS	11991	107983	656	0.6	90.1	3.5
1 ENGINE: TOTAL	203690	167898	995	0.6	82.4	3.5
2 ENG: 1-6 SEATS	18715	16749	246	1.5	89.5	1.3
2 ENG: 7+ SEATS	10138	8607	181	2.1	84.9	1.8
2 ENGINE: TOTAL	28853	25356	306	1.2	87.9	1.1
PISTON: OTHER	341	114	29	25.6	33.7	8.6
PISTON: TOTAL	232884	193370	1042	0.5	83.0	3.4
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	4099	3968	46	1.2	96.8	1.1
2 ENG: 13+ SEATS	601	557	17	3.1	92.8	2.8
2 ENGINE: TOTAL	4700	4525	49	1.1	96.3	1.0
TURBOPROP: OTHER	177	134	5	4.3	76.0	3.3
TURBOPROP: TOTAL	4877	4660	49	1.1	95.6	1.0
FIXED WING - TURBOJET						
2 ENGINE TURBOJET	3083	2808	68	2.4	91.1	2.2
TURBOJET: OTHER	620	362	23	6.5	58.5	3.8
TURBOJET: TOTAL	3703	3171	72	2.3	85.6	2.0
FIXED WING: TOTAL	241464	201201	1045	0.5	83.3	0.4
MULTIENGINE PISTON	5437	3250	173	5.3	59.8	3.2

TABLE 2-6 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT - CY 1981 (2 OF 2)

AIRCRAFT TYPE	POPULATION SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
TURBINE	4047	3724	76	2.0	92.0	1.9
ROTOWING: TOTAL	9484	6974	189	2.7	73.5	2.0
OTHER	6738	5049	179	3.6	74.9	2.7
TOTAL	25766	21326	1078	0.5	82.7	3.4

TABLE 2-7 GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT - CY 1981 (1 OF 3)

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALABAMA	3664	443	2980	398	81.3	14.7
ALASKA	7781	568	6450	533	82.9	9.1
ARIZONA	5994	548	4976	510	83.0	11.4
ARKANSAS	2980	378	2486	350	83.4	15.8
CALIFORNIA	36210	1254	30873	1179	85.3	4.4
COLORADO	6145	564	5498	537	89.5	12.0
CONNECTICUT	1918	316	1686	301	87.9	21.4
DELAWARE	687	181	549	164	80.0	32.0
DC	98	41	54	34	54.7	42.0
FLORIDA	15153	846	12863	795	84.9	7.1
GEORGIA	5041	507	4477	483	88.8	13.1
HAWAII	738	193	623	181	84.4	33.1
IDAHO	2729	375	2349	358	86.1	17.7
ILLINOIS	10090	710	8692	670	86.1	9.0
INDIANA	4862	501	4285	476	87.8	13.3
IOWA	4274	471	3747	446	87.7	14.2
KANSAS	4446	482	3932	458	88.4	14.1
KENTUCKY	1920	314	1687	295	87.9	21.1
LOUISIANA	4242	453	3908	437	92.1	14.3
MAINE	1307	258	1156	247	88.5	25.8
MARYLAND	3153	412	2645	380	83.9	16.3

TABLE 2-7 GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT - CY 1981 (2 OF 3)

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MASSACHUSETTS	2906	390	2409	362	82.9	16.7
MICHIGAN	8694	660	7430	619	85.5	9.6
MINNESOTA	6368	569	5417	532	85.1	11.3
MISSISSIPPI	2525	363	2132	335	84.4	18.0
MISSOURI	5108	522	4465	491	87.4	13.1
MONTANA	2713	399	2463	379	90.8	19.4
NEBRASKA	2590	367	2343	350	90.5	18.7
NEVADA	1704	277	1520	267	89.2	21.4
NEW HAMPSHIRE	1452	279	1202	258	82.8	23.9
NEW JERSEY	4318	475	3659	443	84.7	13.9
NEW MEXICO	2557	364	2247	344	87.9	18.4
NEW YORK	7493	610	5687	541	75.9	9.5
NORTH CAROLINA	4731	492	4300	474	90.9	13.8
NORTH DAKOTA	2006	327	1709	305	85.2	20.6
OHIO	9757	700	8406	657	86.2	9.1
OKLAHOMA	5901	551	5185	524	87.9	12.1
OREGON	6284	556	5640	533	89.8	11.6
PENNSYLVANIA	6961	574	5666	530	81.4	10.2
RHODE ISLAND	380	137	320	127	84.3	45.3
SOUTH CAROLINA	2172	342	1870	320	86.1	20.1
SOUTH DAKOTA	1473	277	1125	242	76.4	21.9
TENNESSEE	3123	407	2730	385	87.4	16.8
TEXAS	21859	997	19481	952	89.1	6.0
UTAH	1676	303	1508	289	90.0	23.7
VERMONT	493	157	447	151	90.8	42.3
VIRGINIA	3178	405	2784	382	87.6	16.4

TABLE 2-7 GENERAL AVIATION ACTIVE AIRCRAFT BY STATE OF BASED AIRCRAFT - CY 1981 (3 OF 3)

STATE	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
WASHINGTON	7217	596	6048	552	83.8	12.3
WEST VIRGINIA	1053	230	942	220	89.4	28.6
WISCONSIN	5196	515	4432	482	85.3	12.6
WYOMING	1184	248	1142	246	96.5	29.0
PUERTO RICO	165	78	124	69	74.8	54.9
OTHER U.S. TERRITORIES	61	56	54	54	89.3	121.2
FOREIGN	869	185	594	151	68.4	22.7
TOTAL	257686		213226	1078	82.7	3.4

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-8 GENERAL AVIATION ACTIVE AIRCRAFT BY REGION OF BASED AIRCRAFT - CY 1981

REGION	ESTIMATE OF POPULATION	STANDARD ERROR	ESTIMATE OF ACTIVE POPULATION	STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
ALASKAN	7781	568	6450	533	82.9	9.1
CENTRAL	16419	903	14489	858	88.2	7.1
EASTERN	26945	1108	21988	1023	81.6	5.1
EUROPEAN OFFICE	307	83	214	70	69.8	29.7
GREAT LAKES	48468	1428	41498	1355	85.6	3.8
NEW ENGLAND	8457	654	7224	615	85.4	9.8
NORTHWEST MT.	28078	1139	24708	1084	88.0	5.3
SOUTHERN	38668	1300	33331	1229	86.2	4.3
SOUTHWESTERN	37785	1267	33440	1209	88.5	4.4
WESTERN-PACIFIC	44728	1364	38074	1287	85.1	3.9
TOTAL	257686		213226	1078	82.7	3.4

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-9 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1981
(1 OF 4)

AIRCRAFT TYPE	TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PERSONAL	INSTAUC- TIONAL	ACTIVE USE			OTHER WORK	COMMUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIVE
						AERIAL APPL	AERIAL OBS	AERIAL OBS						
FIXED WING														
PISTON														
1 ENG: 1-3 SEATS														
EST. TOT. ACT.	59914	1405	2890	35181	8339	6045	1100		617	0	185	1504	2643	23865
% STD. ERROR	A	B	B	A	A	A	B		C	A	D	B	B	
EST. % ACT.	71.5													
1 ENG: 4+ SEATS														
EST. TOT. ACT.	107983	4240	32027	53343	5406	303	1070		319	160	2869	1127	7114	11926
% STD. ERROR	A	B	A	A	A	U	C		U	D	B	B	A	
EST. % ACT.	90.1													
1 ENGINE: TOTAL														
EST. TOT. ACT.	167898	5646	34918	88525	13746	6348	2171		936	160	3055	2632	9757	35791
% STD. ERROR	A	A	A	A	A	A	B		C	D	B	B	A	
EST. % ACT.	82.4													
2 ENG: 1-6 SEATS														
EST. TOT. ACT.	16749	3516	7793	2245	546	43	359		0	92	1508	389	254	1965
% STD. ERROR	A	A	A	B	C	U	D		A	D	B	C	U	
EST. % ACT.	89.5													

STANDARD ERROR		CUDE	
GREATER THAN		LESS THAN	
OK		EQUAL TO	
0 %	10 %	10 %	A
10 %	20 %	20 %	B
20 %	30 %	30 %	C
30 %			D

TABLE 2-9 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1981
(2 OF 4)

AIRCRAFT TYPE		ACTIVE USE												
		TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PERSO- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	COMPUTER CARRIER	AIR TAXI	OTHER	RENTAL	INACTIVE
2 ENG: 7+ SEATS														
EST. TOT. ACT.	8607	2898	2501	528	74	317	86	33	502	1329	297	36	1530	
% STD. ERROR	A	A	A	C	D	D	D	D	C	B	C	D		
EST. % ACT.	84.9													
2 ENGINE: TOTAL														
EST. TOT. ACT.	25350	6414	10294	2774	620	361	446	33	595	2837	687	290	3496	
% STD. ERROR	A	A	A	B	C	D	C	D	C	B	C	D		
EST. % ACT.	87.9													
PISTON: OTHER														
EST. TOT. ACT.	114	48	1	5	0	48	3	0	0	4	12	11	226	
% STD. ERROR	A	C	D	D	A	B	D	A	A	D	B	D		
EST. % ACT.	33.7													
PISTON: TOTAL														
EST. TOT. ACT.	193370	12089	45214	91305	14367	6756	2621	970	755	5897	3331	10059	39513	
% STD. ERROR	A	A	A	A	A	A	B	C	B	A	B	A		
EST. % ACT.	83.0													
FIXED WING - TURBOPROP														
2 ENG: 1-12 SEATS														
EST. TOT. ACT.	3968	2381	920	58	8	0	5	0	0	389	168	30	129	
% STD. ERROR	A	A	B	D	D	A	D	A	A	C	D	D		
EST. % ACT.	90.8													
2 ENG: 13+ SEATS														
EST. TOT. ACT.	557	211	31	0	12	0	0	0	232	25	40	3	43	
% STD. ERROR	A	B	D	A	D	A	A	A	A	D	D	D		
EST. % ACT.	92.8													

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-9 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1981
(3 OF 4)

AIRCRAFT TYPE	TOTAL ACTIVE	ACTIVE USE							OTHER WORK	COMPUTER CARRIER	AIR TAXI	RENTAL	INACTIVE
		EXECU- TIVE	BUSI- NESS	PERSON- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL UNB	OTHER					
2 ENGINE: TOTAL	4525	2593	952	58	20	0	5	0	0	232	414	209	173
EST. TOT. ACT.	A	A	B	D	D	A	D	A	A	A	C	D	
% STD. ERROR	96.3												
EST. % ACT.													
TURBOPROP: OTHER	134	9	9	9	0	67	0	0	0	0	12	16	42
EST. TOT. ACT.	A	D	D	D	A	A	A	A	A	A	B	C	
% STD. ERROR	76.0												
EST. % ACT.													
TURBOJET: TOTAL	4660	2602	962	67	20	67	5	0	0	232	427	225	215
EST. TOT. ACT.	A	A	B	D	D	A	D	A	A	A	C	D	
% STD. ERROR	95.6												
EST. % ACT.													
FIXED WING - TURBOJET													
2 ENGINE TURBOJET	2808	2052	507	4	0	0	10	4	4	18	136	74	274
EST. TOT. ACT.	A	A	B	D	A	A	D	D	D	D	D	D	A
% STD. ERROR	91.1												
EST. % ACT.													
TURBOJET: OTHER	302	205	15	7	0	0	0	0	0	0	0	116	257
EST. TOT. ACT.	A	A	D	D	A	A	A	A	A	A	A	B	
% STD. ERROR	58.5												
EST. % ACT.													
TURBOJET: TOTAL	3171	2257	522	11	0	0	10	4	4	18	136	190	531
EST. TOT. ACT.	A	A	B	D	A	A	D	D	D	D	D	B	
% STD. ERROR	85.6												
EST. % ACT.													

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-9 GENERAL AVIATION ACTIVE AIRCRAFT BY TYPE OF AIRCRAFT AND PRIMARY USE - CY 1981
(4 OF 4)

AIRCRAFT TYPE		ACTIVE USE											
	TOTAL ACTIVE	EXECU- TIVE	BUSI- NESS	PERSON- NAL	INSTRUC- TIONAL	AERIAL APPL	AERIAL OBS	OTHER WORK	CARRIER	AIR TAXI	OTHER	RENTAL	INACTIVE
FIXED WING: TOTAL													
EST. NO. ACT.	201201	10950	40099	91304	14308	0825	2630	974	1305	6461	3747	10127	40261
% STD. ERROR	A	A	A	A	A	A	B	C	B	A	A	A	
EST. % ACT.	83.3												
ROTACRAFT													
PISTON													
EST. NO. ACT.	3250	241	323	589	190	1014	465	71	0	102	261	1	2140
% STD. ERROR	A	U	C	B	U	B	C	D	A	D	C	D	
EST. % ACT.	59.8												
TURBINE													
EST. NO. ACT.	3724	1303	027	70	56	136	191	208	17	630	449	26	322
% STD. ERROR	A	B	C	U	U	C	D	C	D	C	C	D	
EST. % ACT.	92.0												
ROTACRAFT: TOTAL													
EST. NO. ACT.	6974	1525	950	666	254	1150	657	280	17	732	711	28	2463
% STD. ERROR	A	B	B	B	U	B	C	C	U	B	B	U	
EST. % ACT.	73.5												
OTHER													
EST. NO. ACT.	5049	106	65	3458	350	0	89	235	0	32	261	429	1688
% STD. ERROR	A	U	D	A	C	A	D	D	A	D	C	C	
EST. % ACT.	74.9												
TOTAL													
EST. NO. ACT.	213220	10582	47716	95510	14993	7976	3384	1491	1023	7220	4741	10565	44333
% STD. ERROR	A	A	A	A	A	A	B	B	B	A	A	A	A
EST. % ACT.	82.7												

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

NOTE: ROW AND COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

TABLE 2-10 GENERAL AVIATION ACTIVE AIRCRAFT IFR FLOWN AND TRANSPONDER EQUIPPED - CY 1981
(1 OF 2)

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF ACTIVE A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
FIXED WING - PISTON						
1 ENG: 1-3 SEATS	3939	B	6.6	3539	B	89.6
1 ENG: 4+ SEATS	51604	A	47.8	50884	A	98.6
1 ENGINE: TOTAL	55544	A	33.1	54424	A	98.0
2 ENG: 1-6 SEATS	15513	A	92.6	15513	A	100.0
2 ENG: 7+ SEATS	8530	A	99.1	8502	A	99.7
2 ENGINE: TOTAL	24043	A	94.8	24043	A	100.0
PISTON: OTHER	114	B	100.0	114	B	100.0
PISTON: TOTAL	79702	A	41.2	78672	A	98.7
FIXED WING - TURBOPROP						
2 ENG: 1-12 SEATS	3968	A	100.0	3968	A	100.0
2 ENG: 13+ SEATS	557	A	100.0	557	A	100.0
2 ENGINE: TOTAL	4525	A	100.0	4525	A	100.0
TURBOPROP: OTHER	62	A	46.6	62	A	100.0

STANDARD ERROR	CODE
GREATER THAN	-----
LESS THAN OR EQUAL TO	-----
0 %	10 %
10 %	20 %
20 %	30 %
30 %	0

TABLE 2-10 GENERAL AVIATION ACTIVE AIRCRAFT IFR FLOWN AND TRANSPONDER EQUIPPED - CY 1981
(2 OF 2)

AIRCRAFT TYPE	ESTIMATED NUMBER OF A/C FLOWN IFR	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF A/C FLOWN IFR	ESTIMATED NUMBER OF A/C FLOWN IFR WITH TRANSPONDER	PERCENT STANDARD ERROR	ESTIMATED PERCENT OF IFR WITH TRANSPONDER
TURBOPROP: TOTAL	4588	A	98.5	4588	A	100.0
FIXED WING - TURBOJET 2 ENGINE TURBOJET	2808	A	100.0	2808	A	100.0
TURBOJET: OTHER	362	A	100.0	362	A	100.0
TURBOJET: TOTAL	3171	A	100.0	3171	A	100.0
FIXED WING: TOTAL	87461	A	43.5	86909	A	99.4
ROTACRAFT PISTON	8	D	0.3	0	A	0.0
TURBINE	269	C	7.2	269	C	100.0
ROTACRAFT: TOTAL	278	C	4.0	273	C	98.3
OTHER	0	A	0.0	0	A	0.0
TOTAL	87739	A	41.1	87182	A	99.4

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR	CODE
GREATER THAN	-----
LESS THAN	-----
OR	-----
EQUAL TO	-----
0 %	A
10 %	B
20 %	C
30 %	D

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (1 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
OTHER 01	10252	5231	338	6.5	51.0	3.3
OTHER 02	1005	577	72	12.5	57.4	7.2
OTHER 03	437	305	51	16.7	69.9	11.6
OTHER 04	166	21	22	103.7	12.5	13.0
OTHER 05	98	31	4	14.0	31.9	4.5
OTHER 06	155	137	14	10.0	88.4	8.9
OTHER 07	119	93	13	13.8	78.4	10.8
OTHER 08	81	49	5	10.6	60.4	6.4
OTHER 09	451	331	53	15.9	73.5	11.7
OTHER 10	160	93	7	7.3	58.1	4.2
OTHER 11	1718	419	107	25.7	24.4	6.3
OTHER 12	223	132	35	26.7	59.0	15.7
OTHER 13	1904	1097	133	12.1	57.6	7.0
ADAMS A50S	50	44	7	14.6	88.9	13.0
AEROKSJ2	37	9	5	56.0	24.1	13.5
AERUSPAS355	61	61	0	0.0	100.0	0.0
AERUSPAS316	133	127	10	7.5	95.2	7.2
AERUSPAS341	62	44	8	18.1	71.7	13.0
AGUSTA205	59	49	2	4.8	82.8	4.0
AGUSTAA109	23	12	6	50.6	50.0	25.3
AIRPTSA	271	173	31	17.7	63.9	11.3

NOTE: SEE FOLLOWING PAGE FOR CODING.

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT BELONGING

TO MANUFACTURER/MODEL GROUPS OF FEWER THAN 20 AIRCRAFT IN

SIZE FOR AIRCRAFT XX WHERE XX STANDS FOR

- 01 FIXED WING PISTON, 1 ENGINE, 1-3 SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (2 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
AIRSPC18	23	12	3	30.1	50.0	15.0
AIRTRCAT300	320	266	30	11.2	83.1	9.3
AMD FALC10	123	100	14	14.2	81.6	11.6
AMD FALC20	234	202	19	9.6	86.3	8.3
AMD FALC50	46	17	13	76.0	37.5	28.5
AMTR TMK	28	17	7	40.0	60.0	24.0
ARCRNEH37	46	0	0	0.0	0.0	0.0
ARCTICS1A	91	20	11	55.0	22.2	12.2
ARCTICS1B1	24	11	2	15.5	47.8	7.4
ARUNCA15	196	121	28	23.5	61.7	14.5
ARONCA65	149	62	15	23.5	41.4	9.8
ARONCAC3	56	13	2	16.3	23.5	3.8
ARONCAU58	158	83	20	24.5	52.7	12.9
AVIANWFALCON	26	22	5	23.8	83.3	19.8
AVIANWSKYHMK	24	24	0	0.0	100.0	0.0
AYRES S2	931	795	67	8.4	85.4	7.2
BAC 111	31	31	0	0.0	100.0	0.0
BAG B206	35	32	5	16.1	92.0	14.8
BAG DH125	53	53	0	0.0	100.0	0.0
BALWKSFINKEFY	813	700	57	6.1	86.1	7.0
BEECH 100	266	266	0	0.0	100.0	0.0

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (3 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEECH 17	190	75	32	42.0	39.6	16.7
BEECH 18	1002	549	94	17.2	54.8	9.4
BEECH 200	634	634	0	0.0	100.0	0.0
BEECH 23	2893	2722	81	3.0	94.1	2.8
BEECH 33	1617	1571	35	2.2	97.1	2.2
BEECH 35	6980	6602	135	2.0	94.6	1.9
BEECH 36	1690	1690	0	0.0	100.0	0.0
BEECH 45	308	234	28	12.2	75.8	9.2
BEECH 50	345	240	57	23.7	69.5	16.5
BEECH 55	2253	2129	72	3.4	94.5	3.2
BEECH 56	65	61	4	7.1	93.9	6.6
BEECH 58	1296	1291	13	1.0	99.6	1.0
BEECH 60	405	405	0	0.0	100.0	0.0
BEECH 65	160	119	16	13.1	74.1	9.7
BEECH 76	294	291	10	3.3	99.0	3.2
BEECH 77	227	225	6	2.6	99.2	2.6
BEECH 80	223	164	35	21.4	73.4	15.7
BEECH 90	1052	1024	28	2.8	97.3	2.7
BEECH 95	467	482	13	2.6	99.1	2.6
BEECH 99	49	46	4	9.6	93.9	9.0
BELL 204	142	118	14	12.0	83.1	10.0

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SUB AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (4 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BELL 206	1971	1914	53	2.8	97.1	2.7
BELL 212	144	115	28	24.6	80.0	19.7
BELL 222	39	39	0	0.0	100.0	0.0
BELL 412	21	21	0	0.0	100.0	0.0
BELL 47	1488	1239	94	7.6	83.3	6.3
BLANCA11	958	544	62	11.4	56.8	6.5
BLANCA1413	292	83	44	53.3	28.4	15.1
BLANCA1419	298	191	50	26.5	64.0	16.9
BLANCA17	1084	1026	46	4.4	94.6	4.2
BLANCA7	6047	4116	243	5.9	68.1	4.0
BLANCA8	740	709	33	4.6	95.8	4.4
BNRM BN2	95	79	7	8.9	83.6	7.5
BOEING707	55	26	5	20.4	46.5	9.5
BOEING720	19	5	2	54.4	23.8	13.0
BOEING727	61	40	15	38.2	66.3	25.3
BOEING737	15	15	0	0.0	100.0	0.0
BOEING747	22	22	0	0.0	100.0	0.0
BOEING75	1923	647	1.4	19.2	33.7	6.5
BOLAMS105	70	70	0	0.0	100.0	0.0
BRAEROOH125	151	150	0	0.0	99.3	0.0
BRASOVIS28	55	53	3	5.8	95.7	5.6

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (5 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BRWSTKFLLEET2	29	14	2	16.9	48.2	8.2
BRWSTKFLLEET7	22	6	3	58.3	26.7	15.5
BUKER 131	30	6	2	34.1	21.7	7.4
CAMRONMODELU	123	120	6	5.2	97.7	5.0
CESSNA120	898	785	64	8.2	87.4	7.2
CESSNA140	2447	1756	121	6.9	71.8	5.0
CESSNA150	20070	17675	347	2.0	88.1	1.7
CESSNA170	2483	2082	127	6.1	83.9	5.1
CESSNA172	24973	22928	340	1.5	91.8	1.4
CESSNA175	1397	1205	91	7.6	86.3	6.5
CESSNA177	2983	2755	85	3.1	92.4	2.8
CESSNA180	2759	2498	100	4.0	90.5	3.6
CESSNA182	13678	12503	238	1.9	91.4	1.7
CESSNA185	1536	1372	89	6.5	89.3	5.8
CESSNA186	1912	1675	100	6.0	87.6	5.2
CESSNA190	84	48	11	23.2	57.1	13.3
CESSNA195	495	300	34	11.3	60.5	6.9
CESSNA206	3022	2811	97	3.4	93.0	3.2
CESSNA207	399	329	49	15.0	82.4	12.4
CESSNA210	6411	6026	140	2.3	94.0	2.2
CESSNA305	257	239	11	4.5	93.1	4.2

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (6 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CESSNA310	3321	2825	138	4.9	85.1	4.1
CESSNA320	358	313	33	10.6	87.5	9.3
CESSNA335	54	52	2	3.6	96.9	3.5
CESSNA336	98	92	9	9.5	93.5	8.9
CESSNA337	1322	1177	68	5.8	89.0	5.1
CESSNA340	910	910	0	0.0	100.0	0.0
CESSNA401	257	252	10	4.1	98.2	4.0
CESSNA402	742	682	42	6.2	91.9	5.7
CESSNA404	176	148	20	13.3	84.0	11.2
CESSNA411	190	179	18	9.9	94.3	9.3
CESSNA414	743	685	52	7.6	92.2	7.0
CESSNA421	1296	1134	70	6.2	87.5	5.4
CESSNA425	65	61	3	5.3	94.6	5.0
CESSNA441	174	168	9	5.1	96.6	4.9
CESSNA500	439	412	24	5.8	93.8	5.4
CESSNA150	79	7	6	92.3	8.8	8.1
CESSNAUC94	35	12	2	15.4	34.3	5.3
CHILD 52	127	126	4	3.1	99.0	3.1
COMWTh185	106	53	12	23.2	50.0	11.6
CONAERLA4	479	429	33	7.8	89.6	7.0
CUKTISC46	43	18	5	28.5	43.0	12.2

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (7 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
CURTISJR	21	3	1	25.4	15.8	4.0
CURTISMOBIN	35	7	3	37.3	20.1	7.5
CURTISRWALK	183	72	27	37.0	39.3	14.5
CVAC 22	18	4	2	59.6	20.0	11.9
CVAC 240	54	13	4	30.2	23.2	7.0
CVAC 340	23	11	5	48.9	47.1	23.0
CVAC BT13	93	17	8	48.9	18.4	9.0
CVAC L13	22	3	3	105.5	12.5	13.2
CVAC STC580	34	34	0	0.0	100.0	0.0
DART G	26	5	2	32.8	19.4	6.4
DHAV DHC1	88	65	9	13.3	73.7	9.8
DHAV DHC2	320	214	24	11.4	66.8	7.6
DHAV DHC6	116	117	4	3.0	99.0	3.0
DHAVXXDH82	69	35	8	21.7	39.7	8.6
DOUG A26	62	23	4	17.8	37.7	6.7
DOUG DC3	462	328	85	25.9	71.0	18.4
DOUG DC4	84	33	11	32.9	39.2	12.9
DOUG DC6	116	27	26	96.8	23.1	22.3
DOUG DC7	43	24	8	32.6	56.0	18.3
DOUG DC8	45	14	3	19.8	31.0	6.2
DOUG DC9	25	25	0	0.0	100.0	0.0

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (8 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
BEIRVON20	109	100	9	9.0	91.8	8.2
EMAIR MA1	25	15	2	11.0	61.8	6.8
EMB 110	49	49	0	0.0	100.0	0.0
ENSTRMF28	449	412	23	5.7	91.7	5.2
FLEET 168	25	16	3	16.1	62.5	10.1
FRCHLD24	303	89	24	26.7	29.3	7.8
FRCHLDC119	34	34	0	0.0	100.0	0.0
FRCHLDF27	30	25	3	13.6	84.2	11.5
FRCHLDM02	233	106	27	25.2	45.7	11.5
GEMBALAK0	49	40	4	11.0	81.9	9.0
GLASFLLIBELL	158	147	18	12.0	92.9	11.2
GRJB ASTIR	60	59	1	2.5	98.1	2.4
GKTLKS2T1	183	125	21	17.0	68.2	11.6
GRUMANTBM	36	14	5	35.2	37.8	13.3
GRUMAVAA1	631	616	20	3.2	97.6	3.1
GRUMAVAA5	1100	1100	0	0.0	100.0	0.0
GRUMAVG164	614	556	45	8.1	90.5	7.4
GRUMAVG21	53	35	14	39.1	66.7	26.1
GULSTM112	745	661	46	6.9	88.6	6.2
GULSTM500	336	322	17	5.4	95.9	5.2
GULSTM520	61	13	13	104.4	20.8	21.7

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTUREK/MODEL GROUP
CY 1981 (9 OF 16)

MANUFACTUREK/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
GULSTM560	136	119	15	12.2	87.5	10.7
GULSTM680	375	327	45	13.9	87.3	12.1
GULSTM680TP	129	104	14	13.4	80.4	10.8
GULSTM690TP	247	246	4	1.7	99.5	1.7
GULSTMAA1	619	554	37	6.7	89.4	6.0
GULSTMAA5	1058	960	57	5.9	90.7	5.4
GULSTMGL159	149	149	0	0.0	100.0	0.0
GULSTMGL159	132	127	8	6.1	96.3	5.9
GULSTMG44	86	65	8	11.7	76.0	8.9
GULSTMG73	22	8	6	69.4	38.1	26.4
GULSTMGA7	59	59	0	0.0	100.0	0.0
HELIO H250	22	18	2	10.1	83.2	8.4
HELIO H295	105	82	12	15.0	78.1	11.7
HELIO H391	25	16	2	15.5	62.3	9.7
HELIO H395	23	19	2	8.4	82.3	6.9
HILLENFH1100	71	71	0	0.0	100.0	0.0
HILLERUH12	667	505	51	10.1	75.7	7.6
HUGHES269	698	480	78	16.2	68.7	11.2
HUGHES369	564	550	20	3.6	97.6	3.5
HWKSLYDH104	36	10	5	48.5	27.6	13.4
HWKSLYDH125	31	27	2	7.5	85.7	6.4

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (10 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
HYNES B2	135	71	5	7.7	52.3	4.0
ISKAEL1121	114	105	10	9.9	92.4	9.2
ISKAEL1124	138	104	17	16.2	75.0	12.2
JBMSTRDGAL5	82	29	12	40.9	34.8	14.2
KUMLOWD	269	103	15	14.7	38.3	5.7
LAIKFN10	41	15	3	20.3	37.1	7.5
LEAR 23	62	62	0	0.0	100.0	0.0
LEAR 24	193	183	13	7.0	94.8	6.0
LEAR 25	237	237	0	0.0	100.0	0.0
LEAR 35	300	300	0	0.0	100.0	0.0
LET L13	175	150	9	6.2	85.9	5.4
LKHEED1329	142	139	6	4.2	97.8	4.1
LKHEED18	81	29	10	36.1	35.4	12.8
LKHEEDPV1	60	0	0	0.0	0.0	0.0
LKHEEDT33	52	3	4	119.0	6.5	7.8
LUSCOMB	2216	1230	92	7.5	55.5	4.1
MARTIN404	28	4	4	125.4	12.5	15.7
MAULE M4	271	236	10	4.3	87.2	3.7
MAULE M5	425	403	21	5.2	94.8	4.9
MCLISHFUNKB	137	25	14	55.9	18.3	10.2
MEYERSUTM	51	17	7	43.6	33.3	14.5

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (11 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
MNCOUP90	71	23	8	33.2	31.8	10.6
MNMITEM16	147	41	19	45.4	27.8	12.6
MOONELYM20	5896	5684	99	1.7	96.4	1.7
MRCHTIS2C5	49	40	2	5.2	82.5	4.3
MTSBSIMU2	524	499	28	5.6	95.2	5.3
MULTECD16	49	25	9	37.0	50.0	18.5
NAMER B25	53	16	4	28.4	29.3	8.3
NAMER F51	150	47	23	48.7	31.5	15.3
NAMER NA260	69	33	3	9.6	47.6	4.6
NAMER T6	474	318	60	18.9	67.0	12.6
NAVAL N3N	152	36	7	18.4	25.3	4.7
NAVIONNAVION	582	508	38	7.5	87.3	6.5
NORD SV4	46	26	4	15.4	56.9	8.8
ORLHELH19	37	19	8	43.8	50.0	21.9
PICARDAX6	170	131	13	9.8	76.8	7.5
PILATSB4	28	26	2	7.5	94.4	7.1
PIPER 600	341	329	15	4.5	96.5	4.4
PIPER J2	66	23	3	11.2	34.2	3.8
PIPER J3	4263	2479	196	7.9	58.1	4.6
PIPER J4	240	66	23	35.1	27.6	9.7
PIPER J5	349	193	30	15.4	55.4	8.5

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (12 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PIPER PA12	1324	855	103	12.1	64.6	7.8
PIPER PA14	104	101	14	13.8	97.4	13.5
PIPER PA15	190	104	25	24.3	54.8	13.3
PIPER PA16	363	236	39	16.5	64.9	10.7
PIPER PA17	114	58	16	26.7	50.9	13.6
PIPER PA18	3446	2625	194	7.4	76.2	5.6
PIPER PA20	489	295	55	18.6	60.4	11.2
PIPER PA22	5062	3342	215	6.4	66.0	4.2
PIPER PA23	3650	3140	146	4.7	86.0	4.0
PIPER PA24	3293	3192	61	1.9	96.9	1.9
PIPER PA25	1527	1046	117	11.2	68.5	7.6
PIPER PA28	22425	21194	244	1.2	94.5	1.1
PIPER PA30	1300	1295	11	0.9	99.6	0.9
PIPER PA31	2036	1938	52	2.7	95.5	2.6
PIPER PA31T	499	499	0	0.0	100.0	0.0
PIPER PA32	4250	4023	97	2.4	94.7	2.3
PIPER PA34	2052	2023	37	1.8	98.6	1.8
PIPER PA36	328	318	17	5.5	97.0	5.3
PIPER PA36	1561	1508	51	3.4	96.6	3.2
PIPER PA42	37	36	2	5.1	96.0	4.9
PIPER PA44	324	314	12	3.9	97.0	3.8

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (13 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
PROPJT200	95	88	8	6.9	93.2	8.3
RANKIN65	55	23	2	9.8	41.3	4.1
RAVEN RX6	220	177	20	11.3	80.6	9.1
RAVEN S5C	107	42	17	39.3	39.6	15.6
RAVEN S55	568	436	55	12.7	76.7	9.8
RAVEN S60	54	46	5	9.8	85.5	8.3
RKWEEL500	40	38	2	4.6	95.5	4.4
RKWEEL690TP	61	55	5	9.0	90.0	8.1
RKWEEL700	22	22	0	0.0	100.0	0.0
RKWEELNA265	338	323	15	4.5	95.5	4.3
ROBSINK22	108	93	9	9.2	86.5	7.9
ROLSCHLS	110	110	0	0.0	100.0	0.0
RYAN ST3	161	86	27	31.5	53.6	16.9
RYAN STA	33	10	3	26.6	29.8	7.9
SCHLERAS15	38	36	2	4.9	95.0	4.6
SCHLERASW19	55	52	3	5.6	95.1	5.3
SCHLERASW20	78	68	7	9.9	86.7	8.6
SCHLERK8	23	21	2	9.1	91.7	8.3
SCHLERKAO	74	65	6	9.7	88.1	8.5
SCHZERGL64	78	764	64	8.4	84.1	7.0
SCHZERSG1	779	630	61	9.7	80.9	7.8

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (14 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SCWZERSG2	601	442	53	12.0	73.6	8.9
SEMCU CLNGEK	27	15	2	11.2	57.1	6.4
SEMCU MODELT	35	20	6	27.6	56.9	15.7
SKRSKYS55	64	58	14	24.2	69.2	16.8
SKRSKYS56	68	38	10	26.6	55.8	14.9
SKRSKYS58T	21	21	0	0.0	100.0	0.0
SKRSKYS76	53	53	0	0.0	100.0	0.0
SLINDS100	339	306	25	8.3	90.1	7.5
SMITH 600	198	188	10	5.5	94.8	5.2
SNIAS 350	208	175	9	5.0	83.9	4.2
SNIAS SA318	34	34	0	0.0	100.0	0.0
SOCATANS894	42	40	2	4.6	95.8	4.4
SOCATANALLYE	43	43	0	0.0	100.0	0.0
SPRTHCIRKUS	106	84	11	12.8	79.6	10.2
SPRTHNIMBUS	39	39	0	0.0	100.0	0.0
STBROSSD3	29	25	5	19.2	87.0	16.7
STINSON10	173	66	18	26.5	38.4	10.2
STINSONL5	133	64	19	30.2	48.4	14.6
STINSONSK9	26	3	1	31.5	11.5	3.6
STINSONV77	106	29	11	39.0	27.5	10.7
STOLANHC3	236	112	38	33.4	47.6	15.9

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (15 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
SUPAC LA	104	44	11	25.2	42.3	10.7
SUPAC V	28	16	3	18.0	58.8	10.6
SWRNGNSA226	167	167	0	0.0	100.0	0.0
SWRNGNSA26	104	101	6	5.8	97.2	5.7
TCRAFTA	29	3	1	22.3	10.7	2.4
TCRAFTBC	1883	865	126	14.6	46.0	6.7
TCRAFTBF	43	14	2	14.8	33.0	4.9
TCRAFTBL	225	89	20	22.9	39.7	9.1
TEMCO 11A	31	19	4	21.1	60.0	12.7
THUNDRAX7	39	36	3	9.4	93.5	8.8
TMPSONNAVION	348	167	55	32.6	48.1	15.7
TOMCAT47BELL	27	17	4	26.5	61.5	16.3
TKYTEKK	31	4	2	52.0	12.5	6.5
UNIVACGC1	670	407	75	18.5	60.8	11.2
UNIVAR108	2173	1393	145	10.4	64.1	6.7
UNIVAR415	2488	1628	150	9.2	65.4	6.0
VARGA 2150	135	129	7	5.5	95.5	5.3
VICKER745	22	14	3	18.7	61.5	11.5
WACO ASO	30	12	3	25.9	40.9	10.6
WACO GXE	35	7	1	15.6	20.7	3.2
WACO R	32	14	3	25.7	42.3	10.9

TABLE 2-11 GENERAL AVIATION ACTIVE AIRCRAFT BY SDR AIRCRAFT MANUFACTURER/MODEL GROUP
CY 1981 (16 OF 16)

MANUFACTURER/MODEL GROUP	GROUP SIZE	ESTIMATE OF ACTIVE AIRCRAFT	STANDARD ERROR	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	STANDARD ERROR
WACO U	29	6	1	14.9	21.3	3.2
WACO UPF7	158	65	14	22.2	41.4	9.2
WACO YK	54	9	2	22.5	17.2	3.9
WAGNER65	347	123	6	5.2	35.6	1.9
WTHRL1201	75	58	5	8.9	77.0	6.9
TOTAL	257686	213226	1078	0.5	82.7	0.4

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (1 OF 8)

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	MU COMM	4096 CODE	ALT ENC	MU TRANS	LOC	MKER REC	GLIDE SLOPE	MLS	MD ILS
FIXED WING FIXED WING - PISTON 1 ENG: 1-3 SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	38392 A 45.8	14200 A 16.9	8729 A 10.4	33173 A 39.6	20208 A 24.1	2123 B 2.5	63571 A 75.9	12233 A 14.6	6521 A 7.8	3674 B 4.4	123 D 0.1	70106 A 83.7
1 ENG: 4+ SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	61023 A 50.9	62592 A 52.2	82307 A 68.6	5860 A 4.9	99331 A 82.8	41213 A 34.4	20578 A 17.2	84882 A 70.8	80461 A 67.1	69447 A 57.9	283 D 0.2	31746 A 26.5
1 ENGINE: TOTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	99415 A 48.8	76793 A 37.7	91037 A 44.7	39033 A 19.2	119539 A 58.7	43337 A 21.3	84150 A 41.3	97115 A 47.7	86983 A 42.7	73122 A 35.9	406 D 0.2	101853 A 50.0
2 ENG: 1-6 SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	7066 A 37.8	12732 A 68.0	16140 A 86.2	474 C 2.5	18236 A 97.4	15367 A 82.1	478 C 2.6	17771 A 95.0	17641 A 94.3	17208 A 92.0	339 D 1.8	893 B 4.8

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN	
OR		EQUAL TO	
-----		-----	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

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GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY(U)
FEDERAL AVIATION ADMINISTRATION WASHINGTON DC OFFICE OF
MANAGEMENT SYSTEMS J C SCHWENK ET AL. DEC 82

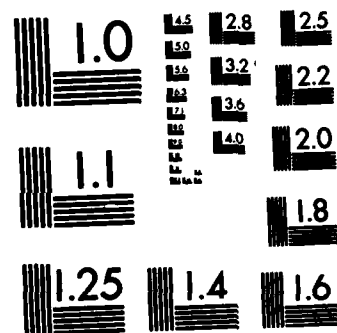
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TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (2 OF 8)

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	MU COMM	4096 CODE	ALT ENC	MU TRANS	LOC	MKR REC	GLIDE SLOPE	MLS	NO ILS
2 ENG: 7+ SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	2764 A	7499 A	8334 A	529 C	5153 A	8258 A	984 B	9402 A	9224 A	5185 A	46 0	694 B
	27.3	74.0	82.2	5.2	90.3	81.5	9.7	92.7	91.0	90.6	0.5	6.9
2 ENGINE: TOTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	9830 A	20232 A	24474 A	1004 B	27390 A	23626 A	1462 B	27174 A	26865 A	26393 A	376 C	1588 B
	34.1	70.1	84.8	3.5	94.9	81.9	5.1	94.2	93.1	51.5	1.3	5.5
PISTON: OTHER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	140 C	148 C	224 A	62 C	249 A	187 B	91 B	245 A	243 A	235 A	0 A	93 B
	41.2	43.4	65.9	18.4	73.2	55.0	26.8	71.9	71.4	69.1	0.0	27.4
PISTON: TOTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	109386 A	97173 A	115737 A	40100 A	147179 A	67152 A	85704 A	124535 A	114092 A	99751 A	783 C	103534 A
	47.0	41.7	49.7	17.2	63.2	28.8	36.8	53.5	49.0	42.8	0.3	44.5
FIXED WING-TURBOPROP 2 ENG: 1-12 SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	665 B	3538 A	3608 A	59 D	4019 A	3906 A	78 D	4036 A	4017 A	4036 A	2 0	61 D
	16.2	86.3	88.0	1.4	98.1	95.3	1.9	98.5	98.0	98.5	0.1	1.5
2 ENG: 13+ SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	115 C	532 A	574 A	4 D	581 A	530 A	19 D	593 A	582 A	593 A	9 0	7 D
	19.2	88.6	95.6	0.7	96.7	88.3	3.3	98.7	96.9	98.7	1.6	1.3

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (3 OF 8)

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 Cd	2+ SYS	NU COMM	4096 CODE	ALT ENC	NU TRANS	LOC	MKER REC	GLIDE SLOPE	MLS	NO ILS
2 ENGINE: TOTAL												
ESTIMATED POPULATION	780	4070	4183	63	4601	4436	97	4630	4599	4630	12	68
% STANDARD ERROR	B	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	16.6	86.6	89.0	1.4	97.9	94.4	2.1	98.5	97.9	98.5	0.3	1.5
TURBOPROP: OTHER												
ESTIMATED POPULATION	23	73	67	84	71	68	105	81	68	65	0	95
% STANDARD ERROR	D	A	A	B	A	A	A	A	A	A	A	A
ESTIMATED % OF TYPE	13.2	41.5	38.1	47.9	40.5	38.5	59.5	45.9	38.5	37.3	0.0	54.1
TURBOPROP: TOTAL												
ESTIMATED POPULATION	803	4143	4250	148	4672	4504	203	4711	4667	4696	12	164
% STANDARD ERROR	B	A	A	C	A	A	C	A	A	A	D	C
ESTIMATED % OF TYPE	16.5	85.0	87.2	3.0	95.8	92.4	4.2	96.6	95.7	96.3	0.3	3.4
FIXED WING-TURBOJET												
2 ENGINE TURBOJET												
ESTIMATED POPULATION	236	2831	2769	135	2935	2896	147	2936	2936	2931	104	146
% STANDARD ERROR	C	A	A	D	A	A	D	A	A	A	D	D
ESTIMATED % OF TYPE	7.7	91.8	89.8	4.4	95.2	94.0	4.8	95.2	95.2	95.1	3.4	4.8
TURBOJET: OTHER												
ESTIMATED POPULATION	92	439	446	118	485	449	134	487	471	471	22	129
% STANDARD ERROR	B	A	A	B	A	A	B	A	A	A	A	B
ESTIMATED % OF TYPE	15.0	70.8	72.1	19.1	78.3	72.5	21.7	78.7	76.0	76.0	3.5	21.0
TURBOJET: TOTAL												
ESTIMATED POPULATION	329	3270	3216	254	3420	3345	282	3424	3407	3402	126	276
% STANDARD ERROR	B	A	A	C	A	A	C	A	A	A	D	C
ESTIMATED % OF TYPE	8.9	88.3	86.9	6.9	92.4	90.4	7.6	92.5	92.0	91.9	3.4	7.5

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (4 OF 8)

AIRCRAFT TYPE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
FIXED WING: TOTAL												
	ESTIMATED POPULATION & STANDARD ERROR											
ESTIMATED % OF TYPE	110520	104587	123203	40503	155272	75002	86190	132671	122167	107850	922	103975
	45.8	43.3	51.0	16.8	64.3	31.1	35.7	54.9	50.6	44.7	0.4	43.1
ROTORCRAFT												
	ESTIMATED POPULATION & STANDARD ERROR											
ESTIMATED % OF TYPE	1670	893	245	2834	997	80	4393	53	4	1	0	5337
	30.7	16.4	4.5	52.1	18.3	1.5	80.8	1.0	0.1	0.0	0.0	98.2
TURBINE												
	ESTIMATED POPULATION & STANDARD ERROR											
ESTIMATED % OF TYPE	1133	2665	1627	338	3139	1172	907	1522	890	1023	12	2407
	28.0	65.9	40.2	8.4	77.6	29.0	22.4	37.6	22.0	25.3	0.3	59.5
ROTORCRAFT: TOTAL												
	ESTIMATED POPULATION & STANDARD ERROR											
ESTIMATED % OF TYPE	2803	3558	1872	3172	4136	1253	5301	1576	894	1024	12	7744
	29.6	37.5	19.7	33.5	43.6	13.2	55.9	16.6	9.4	10.8	0.1	81.7
OTHER												
	ESTIMATED POPULATION & STANDARD ERROR											
ESTIMATED % OF TYPE	2353	708	36	3680	300	140	6437	154	46	44	44	6581
	34.9	10.5	0.5	54.6	4.5	2.1	95.5	2.3	0.7	0.7	0.7	97.7
TOTAL												
	ESTIMATED POPULATION & STANDARD ERROR											
ESTIMATED % OF POP	115677	108854	125113	47355	159709	76396	97929	134402	123108	108919	979	118301
	44.9	42.2	48.6	18.4	62.0	29.6	38.0	52.2	47.8	42.3	0.4	45.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (5 OF 8)

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTMGT COMPT	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	KNAV	LKNAV	FLT DIR	RADAR ALT			
FIXED WING FIXED WING - PISTON 1 ENG: 1-3 SEATS	ESTIMATED POPULATION	31371	16712	7716	6879	1093	475	126	316	289	292	37031
	& STANDARD ERROR	A	A	A	A	B	D	D	D	D	D	A
	ESTIMATED % OF TYPE	37.4	19.9	9.2	8.2	1.3	0.6	0.2	0.4	0.3	0.3	0.3
1 ENG: 4+ SEATS	ESTIMATED POPULATION	48177	73579	87243	82845	39896	9699	651	5193	2618	663	5434
	& STANDARD ERROR	A	A	A	A	A	A	C	A	B	C	A
	ESTIMATED % OF TYPE	40.2	61.4	72.8	69.1	33.3	8.1	0.5	4.3	2.2	0.6	0.6
1 ENGINE: TOTAL	ESTIMATED POPULATION	79549	90292	94959	89725	40989	10174	777	5509	2907	955	42465
	& STANDARD ERROR	A	A	A	A	A	A	C	A	B	C	A
	ESTIMATED % OF TYPE	39.1	44.3	46.6	44.0	20.1	5.0	0.4	2.7	1.4	0.5	0.5
2 ENG: 1-6 SEATS	ESTIMATED POPULATION	5989	13324	17243	17459	16199	6431	225	4929	3689	704	454
	& STANDARD ERROR	A	A	A	A	A	A	D	A	A	C	C
	ESTIMATED % OF TYPE	32.0	71.2	92.1	93.3	86.6	34.4	1.2	26.3	19.7	3.8	2.4
2 ENG: 7+ SEATS	ESTIMATED POPULATION	1972	7977	8913	9222	8370	4369	145	3783	3019	338	527
	& STANDARD ERROR	B	A	A	A	A	A	D	A	A	D	C
	ESTIMATED % OF TYPE	19.5	78.7	87.9	91.0	82.6	43.1	1.4	37.3	29.8	3.3	5.2
2 ENGINE: TOTAL	ESTIMATED POPULATION	7962	21301	26156	26681	24569	10800	370	8713	6708	1043	982
	& STANDARD ERROR	A	A	A	A	A	A	D	A	A	B	B
	ESTIMATED % OF TYPE	27.6	73.8	90.7	92.5	85.2	37.4	1.3	30.2	23.3	3.6	3.4

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (6 OF 8)

AIRCRAFT TYPE	NAVIGATION EQUIPMENT											FLTMGT COMPTK	NO NAVED
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LKNAV	FLT DIR	RADAR ALT				
PISTON: OTHER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	73 C	225 A	252 A	248 A	185 B	90 D	12 D	1 D	36 D	0 A	0	70 C	
	21.6	66.2	74.1	72.8	54.5	26.5	3.7	0.4	10.6	0.0	0.0	20.7	
PISTON: TOTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	87585 A	111819 A	121368 A	116655 A	65745 A	21065 A	1161 B	14223 A	9652 A	1998 B	43518 A	18.7	
	37.6	48.0	52.1	50.1	28.2	9.0	0.5	6.1	4.1	0.9	18.7		
FIXED WING-TURBOPROP 2 ENG: 1-12 SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	631 B	3563 A	4026 A	3972 A	4022 A	3048 A	280 C	3532 A	3642 A	502 B	59 D	1.4	
	15.4	86.9	98.2	96.9	98.1	74.4	6.8	86.2	88.9	12.3	1.4		
2 ENG: 13+ SEATS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	75 D	545 A	588 A	574 A	566 A	152 C	61 D	356 A	354 A	37 D	4 D	0.7	
	12.5	90.8	98.0	95.5	94.3	25.3	10.2	59.3	59.1	6.5	0.7		
2 ENGINE: TOTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	706 B	4109 A	4615 A	4547 A	4589 A	3201 A	341 C	3888 A	3997 A	540 B	63 D	1.4	
	15.0	87.4	98.2	96.7	97.6	68.1	7.3	82.7	85.1	11.5	1.4		
TURBOPROP: OTHER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF TYPE	23 D	71 A	65 A	78 A	64 A	4 D	26 C	38 B	45 B	0 A	84 B	47.9	
	13.3	40.6	36.7	44.1	36.2	2.5	14.7	21.7	25.6	0.0	47.9		

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %		10 %	
10 %		20 %	
20 %		30 %	
30 %		A	
		B	
		C	
		D	

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (7 OF 8)

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLTNGT COMPTK	NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT			
TURBOPROP: TOTAL												
ESTIMATED POPULATION	730	4181	4680	4625	4653	3205	368	3926	4042	546	148	
% STANDARD ERROR	B	A	A	A	A	A	B	A	A	B	C	
ESTIMATED % OF TYPE	15.0	85.7	96.0	94.8	95.4	65.7	7.5	80.5	82.9	11.1	3.0	
FIXED WING-TURBOJET												
2 ENGINE TURBOJET												
ESTIMATED POPULATION	367	2660	2934	2933	2912	1397	1575	2870	2739	610	142	
% STANDARD ERROR	B	A	A	A	A	A	A	A	A	B	D	
ESTIMATED % OF TYPE	11.9	86.3	95.2	95.2	94.5	45.3	51.1	93.1	88.9	19.8	4.6	
TURBOJET: OTHER												
ESTIMATED POPULATION	104	433	474	447	474	161	330	376	410	72	109	
% STANDARD ERROR	C	A	A	A	A	B	A	A	A	C	B	
ESTIMATED % OF TYPE	16.9	69.9	76.6	72.1	76.6	26.0	53.3	60.6	66.2	11.8	17.7	
TURBOJET: TOTAL												
ESTIMATED POPULATION	472	3094	3409	3380	3387	1559	1905	3246	3150	683	252	
% STANDARD ERROR	B	A	A	A	A	A	A	A	A	B	C	
ESTIMATED % OF TYPE	12.8	83.6	92.1	91.3	91.5	42.1	51.5	87.7	85.1	18.5	6.8	
FIXED WING: TOTAL												
ESTIMATED POPULATION	88787	119094	129458	124661	73786	25830	3435	21397	16845	3222	43919	
% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	A	
ESTIMATED % OF TYPE	36.8	49.3	53.6	51.6	30.6	10.7	1.4	8.9	7.0	1.3	18.2	
ROTORCRAFT												
PISTON												
ESTIMATED POPULATION	511	120	20	190	1	0	0	0	0	0	4699	
% STANDARD ERROR	C	D	D	D	D	A	A	A	A	A	A	
ESTIMATED % OF TYPE	9.4	2.2	0.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	86.4	

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-12 GENERAL AVIATION AVIONICS EQUIPMENT BY AIRCRAFT TYPE - CY 1981 (8 OF 8)

AIRCRAFT TYPE	NAVIGATION EQUIPMENT										FLYING COMPTK	NO NAVED
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RADAR ALT			
TURBINE	ESTIMATED POPULATION										38	675
	& STANDARD ERROR											
AUTOCRAFT: TOTAL	ESTIMATED % OF TYPE										1.0	16.7
	ESTIMATED POPULATION											
OTHER	& STANDARD ERROR										38	5375
	ESTIMATED % OF TYPE											
TOTAL	ESTIMATED POPULATION										63	6538
	& STANDARD ERROR											
TOTAL	ESTIMATED % OF POP										0.9	97.0
	ESTIMATED POPULATION											
TOTAL	& STANDARD ERROR										3424	55833
	ESTIMATED % OF POP											

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %		10 %	
10 %		20 %	
20 %		30 %	
30 %		A	
		B	
		C	
		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(1 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR REC	GLIDE SLOPE	MLS	NO ILS	
ALABAMA	ESTIMATED POPULATION	2059	1212	1957	678	2448	1028	1272	2025	1916	1722	0	1557
	% STANDARD ERROR	B	C	B	C	B	C	C	B	B	B	A	B
ALABAMA	ESTIMATED % OF STATE	56.2	33.1	53.4	18.5	66.8	28.1	34.7	55.3	52.3	47.0	0.0	42.5
ALASKA	ESTIMATED POPULATION	4765	2628	1990	726	2192	215	5617	2265	1592	1388	0	5529
	% STANDARD ERROR	A	B	B	C	B	D	A	B	B	B	A	A
ALASKA	ESTIMATED % OF STATE	61.2	33.8	25.6	9.3	28.2	2.8	72.2	29.1	20.5	17.8	0.0	71.1
ARIZONA	ESTIMATED POPULATION	2703	2608	2960	1010	4107	1744	1934	3025	2826	2420	0	2891
	% STANDARD ERROR	B	B	B	C	B	B	B	B	B	B	A	B
ARIZONA	ESTIMATED % OF STATE	45.1	43.5	49.4	16.9	68.5	29.1	32.3	50.5	47.2	40.4	0.0	48.2
ARKANSAS	ESTIMATED POPULATION	1209	879	1084	1007	1469	664	1472	1050	1144	1011	2	1766
	% STANDARD ERROR	C	C	C	C	B	C	B	C	C	C	D	B
ARKANSAS	ESTIMATED % OF STATE	40.6	29.5	36.4	33.8	49.3	22.3	49.4	35.2	38.4	33.9	0.1	59.3
CALIFORNIA	ESTIMATED POPULATION	16800	16239	18183	5116	24382	12602	12269	20276	18318	16568	134	15962
	% STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	D	A
CALIFORNIA	ESTIMATED % OF STATE	46.4	44.8	50.2	14.1	67.3	34.8	33.9	56.0	50.6	45.8	0.4	44.1

STANDARD ERROR				CODE	
GREATER THAN				-----	
LESS THAN				-----	
OR				-----	
EQUAL TO				-----	
0 %				A	
10 %				B	
20 %				C	
30 %				D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(2 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NU COMM	4096 CODE	ALT ENC	NU TRANS	LUC	WKER REC	GLIDE SLOPE	MLS	NU ILS
COLORADO	ESTIMATED POPULATION	2547	3092	3299	867	1814	1959	3218	3220	2898	0	2825
	% STANDARD ERROR	B	B	B	C	B	B	B	B	B	A	B
	ESTIMATED % OF STATE	41.5	50.3	53.7	14.1	29.5	31.9	52.4	52.4	47.2	0.0	46.0
CONNECTICUT	ESTIMATED POPULATION	1029	678	954	308	676	563	1033	1015	968	9	837
	% STANDARD ERROR	C	C	C	D	C	C	C	C	C	D	C
	ESTIMATED % OF STATE	53.6	35.4	49.8	16.1	35.3	29.4	53.9	52.9	50.5	0.5	43.7
DELAWARE	ESTIMATED POPULATION	238	431	454	70	414	108	545	503	503	22	164
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	D	D
	ESTIMATED % OF STATE	34.7	62.7	66.1	10.2	60.2	15.8	76.5	73.3	73.3	3.3	23.9
DC	ESTIMATED POPULATION	22	30	43	38	39	38	43	43	43	0	44
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
	ESTIMATED % OF STATE	22.5	31.3	44.1	38.9	40.2	38.9	44.1	44.1	44.1	0.0	44.8
FLORIDA	ESTIMATED POPULATION	6396	6988	9215	2172	5694	3919	8870	8088	7362	81	5716
	% STANDARD ERROR	A	A	A	B	A	B	A	A	A	D	A
	ESTIMATED % OF STATE	42.2	46.1	60.8	14.3	37.6	25.9	58.5	53.4	48.6	0.5	37.7
GEORGIA	ESTIMATED POPULATION	2759	1753	2519	810	1440	1815	2671	2377	1935	0	2259
	% STANDARD ERROR	B	B	B	C	B	B	B	B	B	A	B
	ESTIMATED % OF STATE	54.7	34.8	50.0	16.1	28.6	36.0	53.0	47.2	38.4	0.0	44.8
HAWAII	ESTIMATED POPULATION	326	231	327	65	114	66	231	195	202	0	386
	% STANDARD ERROR	D	D	D	D	D	D	D	D	D	A	D
	ESTIMATED % OF STATE	44.2	31.3	44.3	8.9	15.5	9.0	31.3	26.5	27.5	0.0	52.4

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN		
OR		EQUAL TO	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(3 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NU COMM	4096 CODE	ALT ENC	NU TRANS	LOC	MKR REC	GLIDE SLOPE	NLS	NO ILS
IDAHO	ESTIMATED POPULATION	1265	1223	1136	420	1677	862	1041	1361	1252	1014	1
	& STANDARD ERROR	C	C	C	C	B	C	C	C	C	C	0
	ESTIMATED % OF STATE	46.3	44.8	41.6	15.4	61.4	32.3	38.2	49.9	45.9	37.1	0.0
ILLINOIS	ESTIMATED POPULATION	5006	3977	5048	1875	6301	2806	3950	5821	5056	4368	12
	& STANDARD ERROR	B	B	B	B	A	B	B	A	B	B	0
	ESTIMATED % OF STATE	49.6	39.4	50.0	18.6	62.5	27.8	39.2	57.7	50.1	43.3	0.1
INDIANA	ESTIMATED POPULATION	2579	1694	2348	739	3052	1170	1736	2500	2321	1836	39
	& STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	0
	ESTIMATED % OF STATE	52.8	34.7	48.1	15.1	62.5	24.0	35.6	51.2	47.5	37.6	0.8
IOWA	ESTIMATED POPULATION	1871	1642	1981	1050	2629	808	1574	2168	2014	1638	0
	& STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	A
	ESTIMATED % OF STATE	43.8	38.4	46.4	24.6	61.5	18.9	36.8	51.2	47.1	38.3	0.0
KANSAS	ESTIMATED POPULATION	1864	1640	1951	937	2778	1178	1556	2381	2148	2068	0
	& STANDARD ERROR	B	B	B	C	B	C	B	B	B	B	A
	ESTIMATED % OF STATE	41.9	36.9	43.9	21.1	62.5	26.5	35.0	53.6	48.3	46.5	0.0
MISSISSIPPI	ESTIMATED POPULATION	817	955	917	286	1195	448	719	1061	1023	851	0
	& STANDARD ERROR	C	C	C	D	C	D	C	C	C	C	A
	ESTIMATED % OF STATE	42.5	49.8	47.8	14.9	62.2	23.4	37.5	55.3	53.3	44.4	0.0
LOUISIANA	ESTIMATED POPULATION	1265	2274	2168	916	2968	1398	1358	2283	2083	1929	0
	& STANDARD ERROR	C	B	B	C	B	B	B	B	B	B	A
	ESTIMATED % OF STATE	29.8	53.6	51.1	21.6	70.0	33.0	32.0	53.8	49.1	45.5	0.3

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(4 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NU COMM	4096 CODE	ALT ENC	NU TRANS	LOC	MKR REC	GLIDE SLOPE	MLS	NO ILS
MAINE	ESTIMATED POPULATION	783	210	393	367	648	149	609	314	302	0	892
	& STANDARD ERROR		D	D	D	C	D	C	D	D	A	C
	ESTIMATED % OF STATE	60.0	16.1	30.1	78.1	49.6	11.4	51.2	32.5	24.0	23.2	0.0
MARYLAND	ESTIMATED POPULATION	1660	986	1488	669	2035	1106	1139	1525	1348	3	1489
	& STANDARD ERROR	B	C	B	C	B	C	C	B	C	D	B
	ESTIMATED % OF STATE	52.6	31.3	47.2	21.2	64.6	35.1	36.1	53.2	48.4	42.6	0.1
MASSACHUSETTS	ESTIMATED POPULATION	1609	1261	1434	361	1934	651	958	1395	1264	0	1298
	& STANDARD ERROR	B	C	B	D	B	C	C	C	C	A	B
	ESTIMATED % OF STATE	55.4	43.4	49.3	12.4	66.6	22.4	33.0	54.9	48.0	43.5	0.0
MICHIGAN	ESTIMATED POPULATION	4790	3197	4252	1430	5040	1805	3570	3811	2994	0	3965
	& STANDARD ERROR	B	B	B	B	B	B	B	B	B	A	B
	ESTIMATED % OF STATE	55.1	36.8	48.9	16.4	58.0	20.8	41.1	50.0	43.8	34.4	0.0
MINNESOTA	ESTIMATED POPULATION	3134	2388	2587	1269	3253	976	3117	2330	1982	122	3622
	& STANDARD ERROR	B	B	B	B	B	C	B	B	B	D	B
	ESTIMATED % OF STATE	49.2	37.5	40.6	19.9	51.1	15.3	48.9	40.0	36.6	31.1	1.9
MISSISSIPPI	ESTIMATED POPULATION	952	888	895	679	1255	490	1253	1040	944	77	1362
	& STANDARD ERROR	C	C	C	C	C	D	B	C	C	D	B
	ESTIMATED % OF STATE	37.7	35.2	35.5	26.9	49.7	19.4	49.7	45.2	41.2	37.4	3.1
MISSOURI	ESTIMATED POPULATION	2870	1988	2629	805	3148	1026	2044	2746	2284	0	2345
	& STANDARD ERROR	B	B	B	C	B	C	B	B	B	A	B
	ESTIMATED % OF STATE	56.2	38.9	51.5	15.8	61.6	20.1	40.0	51.2	53.8	44.7	0.0

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
-----		-----	
0 %		10 %	A
10 %		20 %	B
20 %		30 %	C
30 %			D

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(5 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LUC	MKER DEC	GLIDE SLOPE	MLS	NO ILS
MONTANA												
ESTIMATED POPULATION & STANDARD ERROR	1322 C	1011 C	843 C	421 D	1345 C	323 D	1354 C	869 C	774 C	854 C	0 A	1831 B
ESTIMATED % OF STATE	48.7	37.3	31.1	15.5	49.6	11.9	49.9	32.0	28.5	31.5	0.0	67.5
NEBRASKA												
ESTIMATED POPULATION & STANDARD ERROR	916 C	1096 C	1077 C	608 C	1222 C	386 D	1277 B	928 C	919 C	787 C	0 A	1516 B
ESTIMATED % OF STATE	35.4	42.3	41.6	23.5	47.2	14.9	49.3	35.8	35.5	30.4	0.0	58.6
NEVADA												
ESTIMATED POPULATION & STANDARD ERROR	677 C	914 C	894 C	264 D	1177 C	791 C	503 C	899 C	814 C	897 C	4 D	781 C
ESTIMATED % OF STATE	39.7	53.7	52.5	15.5	69.0	46.4	29.6	52.8	47.8	52.6	0.3	45.8
NEW HAMPSHIRE												
ESTIMATED POPULATION & STANDARD ERROR	523 D	724 C	714 C	151 D	874 C	590 D	522 D	871 C	810 C	819 C	0 A	525 C
ESTIMATED % OF STATE	36.0	49.9	49.2	10.4	60.2	40.6	36.0	60.0	56.2	56.5	0.0	36.2
NEW JERSEY												
ESTIMATED POPULATION & STANDARD ERROR	1957 B	2223 B	2654 B	553 C	2580 B	1790 B	1768 B	2565 B	2503 B	1949 B	14 D	1581 B
ESTIMATED % OF STATE	45.3	51.5	61.5	12.8	59.8	41.5	40.9	59.4	58.0	45.1	0.3	36.6
NEW MEXICO												
ESTIMATED POPULATION & STANDARD ERROR	1029 C	1137 C	1274 C	507 C	1684 B	1069 C	904 C	1302 C	1178 C	1039 C	7 D	1244 C
ESTIMATED % OF STATE	40.2	44.5	49.8	19.8	65.9	41.8	35.3	50.9	46.1	40.6	0.3	48.6
NEW YORK												
ESTIMATED POPULATION & STANDARD ERROR	3682 B	2806 B	3782 B	1359 B	4560 B	2191 B	2691 B	4213 B	3790 B	3321 B	87 D	2801 B
ESTIMATED % OF STATE	49.1	37.4	50.5	18.1	60.9	29.2	35.9	56.2	50.6	44.3	1.2	38.2

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(6 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT			ILS RECEIVING EQUIPMENT				
	360 CH	720 CH	2+ SYS	NU COMM	4096 CODE	ALT ENC	NU TRANS	LUC	MKR REC	GLIDE SLOPE	MLS	NU ILS
NORTH CAROLINA												
	2078	1958	2292	899	3368	1603	1347	2831	2666	2393	4	1809
	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED POPULATION & STANDARD ERROR												
	43.9	41.4	48.5	19.0	71.2	33.9	28.5	59.8	56.4	50.6	0.1	38.2
NORTH DAKOTA												
	766	586	637	755	933	423	1096	699	602	552	2	1325
	C	D	C	C	C	D	C	C	D	U	U	C
ESTIMATED POPULATION & STANDARD ERROR												
	38.2	29.2	31.8	37.7	46.5	21.1	54.6	34.8	30.0	27.5	0.1	66.0
OHIO												
	4825	4119	5230	1684	6529	2551	3287	5615	5175	3654	0	4072
	B	B	A	B	A	B	B	A	B	B	A	B
ESTIMATED POPULATION & STANDARD ERROR												
	49.5	42.2	53.6	17.3	66.9	26.2	33.7	57.6	53.0	39.5	0.0	41.7
OKLAHOMA												
	2203	2849	3178	927	4195	2155	1673	3424	3007	2644	28	2432
	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED POPULATION & STANDARD ERROR												
	37.3	48.3	53.9	15.7	71.1	36.5	28.4	58.0	51.0	44.8	0.5	41.2
OREGON												
	2845	3180	3581	779	4364	2056	2001	3705	3553	2954	97	2252
	B	B	B	C	B	B	B	B	B	B	D	B
ESTIMATED POPULATION & STANDARD ERROR												
	45.3	50.6	57.0	12.4	69.5	32.7	31.9	59.0	56.5	47.0	1.6	35.8
PENNSYLVANIA												
	3270	2771	3561	1251	4216	2051	2747	3731	3528	2910	36	2993
	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED POPULATION & STANDARD ERROR												
	47.0	39.8	51.2	18.0	60.6	29.5	39.5	53.6	50.7	41.8	0.5	43.0
RHODE ISLAND												
	237	121	86	40	310	92	72	150	150	150	0	233
	D	D	D	D	D	D	D	D	D	D	A	D
ESTIMATED POPULATION & STANDARD ERROR												
	62.5	31.9	22.8	10.7	81.8	24.4	19.2	39.5	39.5	39.5	0.0	61.4

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
-----		-----	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		U	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(7 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MEER REC	GLIDE SLOPE	NLS	NO ILS
SOUTH CAROLINA												
ESTIMATED POPULATION & STANDARD ERROR	942 C	973 C	1025 C	375 D	1393 B	642 C	704 C	1269 C	1010 C	851 C	0 A	791 C
ESTIMATED % OF STATE	43.4	44.8	47.2	17.3	64.2	29.6	32.4	58.4	46.5	39.2	0.0	36.4
SOUTH DAKOTA												
ESTIMATED POPULATION & STANDARD ERROR	700 C	348 D	441 D	380 D	544 D	103 D	847 C	418 D	400 D	223 D	0 A	922 C
ESTIMATED % OF STATE	47.6	23.6	30.0	25.8	37.0	7.0	57.5	28.4	27.2	15.2	0.0	62.6
TENNESSEE												
ESTIMATED POPULATION & STANDARD ERROR	1409 C	1527 B	1793 B	491 C	2240 B	1214 C	944 C	1856 B	1789 B	1643 B	4 D	1279 C
ESTIMATED % OF STATE	45.1	48.9	57.4	15.7	71.7	38.9	30.3	59.4	57.3	52.6	0.1	41.0
TEXAS												
ESTIMATED POPULATION & STANDARD ERROR	8138 A	11243 A	11623 A	3953 B	15299 A	8151 A	6630 A	12627 A	11915 A	11120 A	23 D	9094 A
ESTIMATED % OF STATE	37.2	51.4	53.2	18.1	70.0	37.3	30.3	57.8	54.5	50.9	0.1	41.2
UTAH												
ESTIMATED POPULATION & STANDARD ERROR	540 D	978 C	908 C	185 D	1322 C	759 C	348 D	964 C	919 C	859 C	4 D	701 C
ESTIMATED % OF STATE	32.2	58.3	54.2	11.1	78.9	45.3	20.8	57.5	54.8	51.3	0.3	41.8
VERMONT												
ESTIMATED POPULATION & STANDARD ERROR	221 D	176 D	205 D	100 D	270 D	114 D	222 D	255 D	207 D	203 D	1 D	235 D
ESTIMATED % OF STATE	44.8	35.7	41.7	20.3	54.9	23.2	45.0	51.8	42.0	41.3	0.3	47.7
VIRGINIA												
ESTIMATED POPULATION & STANDARD ERROR	1327 C	1673 B	1949 B	533 C	2270 B	1397 B	975 C	2177 B	1969 B	1708 B	62 D	971 C
ESTIMATED % OF STATE	41.8	52.7	61.4	16.8	71.4	44.0	30.7	68.5	62.0	53.8	2.0	30.6

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(8 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	MO TRANS	LOC	MKEK BEC	GLIDE SLOPE	MLS	MD ILS
WASHINGTON	3245	2720	2922	1624	4196	1290	3041	3857	3096	2469	36	3143
	B	B	B	B	B	B	B	B	B	B	D	B
	45.0	37.7	40.5	22.5	58.1	17.9	42.1	53.4	42.9	34.5	0.5	43.5
WEST VIRGINIA	487	465	682	120	806	447	249	809	660	581	3	245
	D	D	C	D	C	D	D	C	C	C	D	D
	40.3	44.5	64.7	11.5	76.6	42.5	23.6	76.8	63.2	55.2	0.4	23.3
WISCONSIN	2608	1907	2449	900	2791	1244	2396	4505	2338	1985	7	2616
	B	B	B	C	B	B	B	B	B	B	D	B
	50.2	36.7	47.1	17.3	53.7	23.9	46.1	48.2	45.0	38.2	0.2	50.4
WYOMING	524	609	543	151	787	403	416	540	527	510	3	649
	D	D	D	D	C	D	D	D	D	D	A	C
	44.3	51.4	45.9	12.8	66.4	34.0	35.2	45.6	44.5	43.1	0.3	54.8
PUERTO RICO	73	81	115	12	105	50	55	119	94	108	0	40
	D	D	D	D	D	D	D	D	D	D	A	D
	44.2	48.9	69.5	7.6	63.4	30.6	33.4	72.2	56.8	65.2	0.3	24.5
OTHER U.S. TERRITORIES	34	23	30	3	46	8	13	35	30	27	0	24
	D	D	D	D	D	D	D	D	D	D	A	D
	56.1	38.5	50.1	6.1	75.9	13.7	22.6	58.5	50.1	45.0	0.0	40.1
FOREIGN	248	535	621	136	617	464	250	622	514	487	27	245
	D	C	C	D	C	C	D	C	C	C	D	D
	28.6	61.6	71.5	15.7	71.0	53.5	28.8	71.6	59.2	56.0	3.2	48.2

STANDARD ERROR				CODE	
GREATER THAN				---	
LESS THAN				---	
OR				---	
EQUAL TO				---	
0 %				A	
10 %				B	
20 %				C	
30 %				D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(9 OF 17)

STATE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER DEC	GLIDE SLOPE	NLS	NO ILS
TOTAL	115677	104854	125113	47355	159709	76396	97929	134402	123108	108919	979	118301
ESTIMATED POPULATION	A	A	A	A	A	A	A	A	A	A	B	A
% STANDARD ERROR	44.9	42.2	48.6	18.4	62.0	29.6	38.0	52.2	47.8	42.3	0.4	45.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR				CODE	
-----				----	
GREATER				LESS THAN	
THAN				OR	
EQUAL TO				-----	
-----				-----	
0 %				10 %	
10 %				20 %	
20 %				30 %	
30 %				D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(10 OF 17)

STATE	NAVIGATION EQUIPMENT										FLTAGT COMPTK	NU NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	AOF	DME	KNAV	LKNV	FLT DIR	RAVAR ALT			
ALABAMA												
ESTIMATED POPULATION & STANDARD ERROR	1435 C	1388 B	2210 B	1895 B	941 C	379 D	19 D	378 D	197 D	34 D	901 C	
ESTIMATED % OF STATE	39.2	37.9	60.3	51.7	25.7	10.4	0.5	10.3	5.4	0.9	24.6	
ALASKA												
ESTIMATED POPULATION & STANDARD ERROR	3401 B	2651 B	1587 B	3865 B	560 C	136 D	11 D	136 D	202 D	3 D	1605 B	
ESTIMATED % OF STATE	43.7	34.1	20.4	49.7	7.2	1.8	0.1	1.8	2.6	0.0	20.6	
ARIZONA												
ESTIMATED POPULATION & STANDARD ERROR	2156 B	3047 B	3078 B	2928 B	1472 B	353 D	24 D	336 D	332 D	145 D	1211 B	
ESTIMATED % OF STATE	36.0	50.8	51.4	48.9	24.6	5.9	0.4	5.6	5.6	2.4	20.2	
ARKANSAS												
ESTIMATED POPULATION & STANDARD ERROR	1067 C	1027 C	1211 C	1303 B	590 C	137 D	39 D	274 D	200 D	39 D	1006 C	
ESTIMATED % OF STATE	35.8	34.5	40.7	43.7	19.8	4.6	1.3	9.2	6.7	1.3	33.8	
CALIFORNIA												
ESTIMATED POPULATION & STANDARD ERROR	12163 A	18840 A	18900 A	16323 A	9911 A	3363 B	228 C	2453 B	1862 B	187 D	6918 A	
ESTIMATED % OF STATE	33.6	52.0	52.2	45.1	27.4	9.3	0.6	6.8	5.1	0.5	19.1	
COLORADO												
ESTIMATED POPULATION & STANDARD ERROR	2185 B	3076 B	3251 B	3282 B	1981 B	691 C	33 D	704 C	337 D	37 D	1239 B	
ESTIMATED % OF STATE	35.6	50.1	52.9	53.4	32.2	11.3	0.5	11.5	5.5	0.6	20.2	

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(11 OF 17)

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ KCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT	FLTMGT CUMPTK	NU NAVEW
CONNECTICUT	ESTIMATED POPULATION	842	771	990	980	500	60	14	73	116	27
	% STANDARD ERROR	C	C	C	C	U	U	U	D	U	U
DELAWARE	ESTIMATED % OF STATE	43.9	40.2	51.0	51.1	26.1	3.2	0.8	3.8	0.1	1.4
											20.3
DC	ESTIMATED POPULATION	257	366	471	355	324	122	15	104	86	50
	% STANDARD ERROR	U	U	D	D	U	U	U	D	U	U
FLORIDA	ESTIMATED % OF STATE	37.5	53.4	68.5	51.7	47.2	17.8	2.3	15.1	14.6	7.4
											11.5
GEORGIA	ESTIMATED POPULATION	0	43	43	43	43	37	5	42	33	18
	% STANDARD ERROR	A	U	U	D	U	U	U	U	U	U
HAWAII	ESTIMATED % OF STATE	0.0	44.1	44.1	44.1	44.1	37.9	5.1	43.0	34.4	18.6
											44.8
IDAHO	ESTIMATED POPULATION	4926	8079	9038	9050	5203	1673	222	1338	1338	238
	% STANDARD ERROR	B	A	A	A	A	B	D	B	B	B
ILLINOIS	ESTIMATED % OF STATE	32.5	53.3	59.6	59.7	34.3	11.0	1.5	0.9	8.8	1.0
											14.8
INDIANA	ESTIMATED POPULATION	1923	2220	2424	2297	1346	448	31	596	299	9
	% STANDARD ERROR	B	B	B	B	B	U	U	C	U	C
IOWA	ESTIMATED % OF STATE	38.2	44.0	48.1	45.6	26.7	8.9	0.6	11.8	5.9	0.2
											19.9
KANSAS	ESTIMATED POPULATION	242	308	308	166	137	12	8	36	6	0
	% STANDARD ERROR	U	U	U	D	U	U	U	U	D	A
LOUISIANA	ESTIMATED % OF STATE	32.8	33.1	41.7	22.5	18.6	1.7	1.2	4.9	1.2	0.0
											17.9
MAINE	ESTIMATED POPULATION	982	1299	1217	1267	592	230	50	145	98	17
	% STANDARD ERROR	C	C	C	C	C	U	U	D	U	U
MARYLAND	ESTIMATED % OF STATE	36.0	47.6	44.6	46.4	21.7	8.4	1.8	5.3	3.0	0.0
											19.5

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		U	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED / RCRAFT - CY 1981
(12 OF 17)

STATE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ KCH	AUF	UME	RNAV	LKNAV	FLT DTK	RAVAN ALT	FLTRGT CUMPTK	NU NAVED
ILLINOIS	ESTIMATED POPULATION	4219	4473	5258	4874	2909	903	94	863	538	92
	& STANDARD ERROR	B	B	A	B	B	C	D	C	C	U
INDIANA	ESTIMATED & OF STATE	41.8	44.3	52.1	48.3	28.8	9.0	0.9	8.6	5.3	0.9
											20.8
IOWA	ESTIMATED POPULATION	1968	2237	2491	2314	1500	439	23	262	289	31
	& STANDARD ERROR	B	B	B	B	B	D	U	U	U	U
KANSAS	ESTIMATED & OF STATE	40.3	45.8	51.0	47.4	30.7	9.0	0.5	5.4	5.9	0.6
											15.5
KENTUCKY	ESTIMATED POPULATION	1491	1915	2145	2019	1045	413	23	310	189	15
	& STANDARD ERROR	B	B	B	B	C	D	U	U	U	U
LOUISIANA	ESTIMATED & OF STATE	34.9	44.8	50.2	47.2	24.5	9.7	0.6	7.3	4.0	0.4
											24.1
MAINE	ESTIMATED POPULATION	1410	2010	2161	2226	1310	441	142	169	159	106
	& STANDARD ERROR	C	B	B	B	B	U	U	D	D	D
MARYLAND	ESTIMATED & OF STATE	31.7	45.2	48.6	50.1	29.6	9.9	3.2	3.8	3.6	2.4
											20.5
MASSACHUSETTS	ESTIMATED POPULATION	701	1010	1117	1046	529	139	33	177	126	25
	& STANDARD ERROR	C	C	C	C	C	D	U	U	U	U
MICHIGAN	ESTIMATED & OF STATE	36.5	52.6	58.2	54.5	27.6	7.3	1.7	9.2	6.6	1.3
											18.1
MINNESOTA	ESTIMATED POPULATION	1036	2024	2125	2648	1416	663	354	564	389	19
	& STANDARD ERROR	C	B	B	B	B	C	D	C	C	D
MISSISSIPPI	ESTIMATED & OF STATE	24.4	47.7	50.1	62.4	33.4	15.6	8.4	13.3	9.2	0.5
											22.9
MISSOURI	ESTIMATED POPULATION	590	374	490	420	212	18	2	37	35	2
	& STANDARD ERROR	D	D	D	D	D	D	D	D	D	D
MONTANA	ESTIMATED & OF STATE	45.2	28.6	37.5	32.2	16.3	1.4	0.2	2.8	2.7	0.2
											30.7

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO	-----	
		0 %	A
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(13 OF 17)

STATE	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ KCVR	ADF	DME	KNAV	LKNAV	FLT DIR	RADAR ALT	FLTMGT CUMPTM	
MARYLAND											
ESTIMATED POPULATION	1260	1370	1615	1436	650	209	22	170	129	67	741
& STANDARD ERROR	C	C	B	B	C	D	D	D	D	D	C
ESTIMATED % OF STATE	40.0	43.5	51.2	45.5	20.6	6.6	0.7	5.4	4.1	2.1	23.5
MASSACHUSETTS											
ESTIMATED POPULATION	1299	1505	1561	1370	662	189	8	77	142	15	406
& STANDARD ERROR	C	B	B	C	C	D	D	D	D	D	D
ESTIMATED % OF STATE	44.7	51.8	53.7	47.2	22.8	6.5	0.3	2.7	4.9	0.5	14.0
MICHIGAN											
ESTIMATED POPULATION	3935	4074	4347	3707	1839	709	105	529	425	111	1581
& STANDARD ERROR	B	B	B	B	B	C	D	C	C	D	B
ESTIMATED % OF STATE	45.3	46.9	50.0	42.6	21.2	8.2	1.2	6.1	4.9	1.3	18.2
MINNESOTA											
ESTIMATED POPULATION	2562	2553	2743	2975	1392	648	99	226	206	73	1475
& STANDARD ERROR	B	B	B	B	B	C	D	D	D	D	B
ESTIMATED % OF STATE	40.2	40.1	43.1	46.7	21.9	10.2	1.6	3.6	3.2	1.2	23.2
MISSISSIPPI											
ESTIMATED POPULATION	781	886	1207	1174	809	438	13	251	228	3	859
& STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	C
ESTIMATED % OF STATE	31.0	35.1	47.8	46.5	32.0	17.4	0.5	10.0	9.0	0.1	34.0
MISSOURI											
ESTIMATED POPULATION	2635	1985	2539	2601	1496	328	17	273	335	90	765
& STANDARD ERROR	B	B	B	B	B	D	D	D	D	D	C
ESTIMATED % OF STATE	51.6	38.9	49.7	50.9	29.3	6.4	0.3	5.4	6.6	1.8	15.0
MONTANA											
ESTIMATED POPULATION	973	1087	1067	1221	467	132	8	230	79	26	736
& STANDARD ERROR	C	C	C	C	D	D	D	D	D	D	C
ESTIMATED % OF STATE	35.9	40.1	39.3	45.0	17.2	4.9	0.3	8.5	2.9	1.0	27.1

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %	10 %	10 %	A
10 %	20 %	20 %	B
20 %	30 %	30 %	C
30 %			D

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(14 OF 17)

STATE	NAVIGATION EQUIPMENT											FLYING COMPLETE	NU NAVED
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LORNAV	FLT DIR	RADAR ALT				
NEBRASKA	ESTIMATED POPULATION	818	1064	1107	1051	401	239	0	107	73	0	739	
	% STANDARD ERROR	C	C	C	C	D	D	A	D	D	A	C	
NEBRASKA	ESTIMATED % OF STATE	31.6	41.1	42.8	40.6	15.5	9.2	0.0	4.2	2.8	0.0	28.6	
NEVADA	ESTIMATED POPULATION	578	848	935	922	574	132	32	124	130	9	342	
	% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	D	
NEVADA	ESTIMATED % OF STATE	34.0	49.8	54.9	54.1	33.7	7.8	1.9	7.3	7.7	0.6	20.1	
NEW HAMPSHIRE	ESTIMATED POPULATION	422	730	837	877	409	163	12	81	117	13	247	
	% STANDARD ERROR	D	C	C	C	D	D	D	D	D	D	D	
NEW HAMPSHIRE	ESTIMATED % OF STATE	29.1	50.3	57.7	60.5	28.2	11.3	0.9	5.6	8.1	0.9	17.1	
NEW JERSEY	ESTIMATED POPULATION	1316	2545	2575	2279	1448	443	197	333	302	162	655	
	% STANDARD ERROR	C	B	B	B	B	D	D	D	D	D	C	
NEW JERSEY	ESTIMATED % OF STATE	30.5	59.0	59.6	52.8	33.6	10.3	4.6	7.7	7.0	3.8	15.2	
NEW MEXICO	ESTIMATED POPULATION	946	1099	1322	1354	800	391	7	240	186	5	593	
	% STANDARD ERROR	C	C	C	C	C	D	D	D	D	D	C	
NEW MEXICO	ESTIMATED % OF STATE	37.0	43.0	51.7	53.0	31.3	15.3	0.3	9.4	7.3	0.2	23.2	
NEW YORK	ESTIMATED POPULATION	3130	3129	4097	3401	2227	443	139	528	365	134	1464	
	% STANDARD ERROR	B	B	B	B	B	C	C	C	C	D	B	
NEW YORK	ESTIMATED % OF STATE	41.8	41.8	54.7	45.4	29.7	5.9	1.9	7.1	4.9	1.8	19.5	
NORTH CAROLINA	ESTIMATED POPULATION	1295	2802	2634	2545	1472	759	33	440	403	34	955	
	% STANDARD ERROR	C	B	B	B	B	C	D	C	C	D	C	
NORTH CAROLINA	ESTIMATED % OF STATE	27.4	59.2	55.7	53.8	31.1	16.0	0.7	9.3	8.5	0.7	20.2	

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN	
OK		EQUAL TO	
0 %		10 %	
10 %		20 %	
20 %		30 %	
30 %		A	
		B	
		C	
		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(15 OF 17)

STATE	NAVIGATION EQUIPMENT											FLYING CUMPTK	NO NAVED
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	MNAV	LNAV	FLT DIR	RADAR ALT				
NORTH DAKOTA ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	658 D	674 C	632 C	666 D	619 D	349 D	7 0	81 D	94 D	9 0	732 C	36.5	
	32.8	33.6	31.5	33.2	30.9	17.4	0.4	4.1	4.7	0.5			
OHIO ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	3813 B	4481 B	5449 A	5181 B	2473 B	961 C	108 C	931 B	594 C	145 D	1863 B	19.1	
	39.1	45.9	55.9	53.1	25.4	9.9	1.1	9.6	6.1	1.5			
OKLAHOMA ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	1949 B	3218 B	3453 B	3104 B	2088 B	896 C	106 D	673 C	487 C	87 D	962 C	16.3	
	33.0	54.5	58.5	52.6	35.4	15.2	1.8	11.4	8.3	1.5			
OREGON ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	2178 B	3500 B	3615 B	3269 B	2141 B	560 C	41 D	169 C	249 C	2 D	1657 B	16.8	
	34.7	55.7	57.5	52.0	34.1	8.9	0.7	7.5	4.0	0.0			
PENNSYLVANIA ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	2781 B	3259 B	3598 B	3432 B	2260 B	787 C	109 D	683 C	443 C	70 D	1339 B	19.2	
	40.0	46.8	51.7	49.3	32.5	11.3	1.6	9.8	6.4	1.0			
RHODE ISLAND ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	179 D	159 D	118 D	150 D	81 D	32 D	4 D	11 D	40 D	0 A	58 D	15.3	
	47.3	41.9	31.1	39.5	21.3	8.4	1.2	3.1	10.6	0.0			
SOUTH CAROLINA ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF STATE	699 C	1029 C	1126 C	1133 C	703 C	251 D	5 D	225 D	86 D	35 D	404 D	18.6	
	32.2	47.4	51.8	52.2	32.4	11.6	0.3	10.4	4.0	1.6			

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN	-----	
	OR	-----	
	EQUAL TO	-----	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(16 OF 17)

STATE	NAVIGATION EQUIPMENT											NO NAVED
	VOR 100CH	VOR 200CH	2+ KCVR	AUF	DMC	RNAV	LKNAV	FLI DIR	RADAR ALT	FLTMGT COMPTK		
SOUTH DAKOTA	487	445	481	343	157	52	35	66	32	0	501	
	D	D	D	D	D	D	D	D	D	A	D	
	33.1	30.2	32.7	23.3	10.7	3.5	2.4	4.5	2.2	0.0	34.1	
TENNESSEE	1111	1680	1811	1897	1169	581	11	252	299	2	488	
	C	B	B	B	B	C	D	D	C	D	C	
	35.6	54.0	58.0	60.7	37.4	18.6	0.4	8.1	9.6	0.1	15.7	
TEXAS	6077	12185	12109	12466	8440	3286	437	2986	1782	540	4397	
	A	A	A	A	A	B	C	B	B	C	A	
	27.8	55.7	55.4	57.0	38.6	15.0	2.0	13.7	8.2	2.5	20.1	
UTAH	584	980	995	1001	549	53	60	153	120	6	132	
	D	C	C	C	D	D	D	D	D	D	D	
	34.9	58.5	59.4	59.8	32.8	3.2	3.9	9.1	7.2	0.4	7.9	
VERMONT	163	183	221	206	104	39	0	32	13	3	132	
	D	D	D	D	D	D	A	D	D	D	D	
	33.1	37.2	45.0	41.9	21.2	8.1	0.0	6.6	2.8	0.7	26.8	
VIRGINIA	1104	1682	2219	1992	1233	402	92	216	296	67	601	
	C	B	B	B	C	D	D	D	D	D	C	
	34.8	52.9	69.8	62.7	38.8	12.7	2.9	6.8	9.3	2.1	18.9	
WASHINGTON	2322	3500	3196	3243	1430	325	98	189	262	12	1788	
	B	B	B	B	B	D	D	D	D	D	B	
	32.2	48.5	44.3	44.9	19.8	4.5	1.4	2.6	3.6	0.2	24.8	

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO	-----	
		0 %	10 %
			A
		10 %	B
		20 %	C
		30 %	D

TABLE 2-13 GENERAL AVIATION AVIONICS EQUIPMENT BY STATE OF BASED AIRCRAFT - CY 1981
(17 OF 17)

STATE	NAVIGATION EQUIPMENT										FLTMGT COMPTK	NU BASED
	VOR 100CH	VOR 200CH	2+ KCVR	ADF	DME	KNAV	LKNAV	FLT DIR	RADAR ALT			
WEST VIRGINIA	437	481	770	711	415	231	5	84	107	33	152	
		U	C	C	U	D	U	U	U	U	U	
	41.5	45.7	73.1	67.5	39.4	22.0	0.5	8.1	10.2	3.2	14.5	
MISCONSIN	2087	2239	2682	2440	1335	377	42	310	216	76	1061	
		B	B	B	B	D	U	U	U	U	B	
	40.2	43.1	51.6	47.0	25.7	7.3	0.8	6.0	4.2	1.5	20.4	
WYOMING	426	604	601	642	465	135	4	87	72	23	191	
		C	C	C	U	U	U	U	U	U	U	
	36.0	51.1	50.8	54.3	39.3	11.4	0.4	7.4	6.1	2.0	16.2	
PUERTO RICO	46	101	97	131	52	19	0	6	5	0	22	
		U	D	D	U	U	A	U	U	A	U	
	28.0	61.2	58.9	79.3	31.9	11.7	0.0	3.8	3.1	0.0	13.6	
OTHER U.S. TERRITORIES	22	32	32	54	9	0	0	0	0	0	5	
		U	D	U	D	A	A	A	A	A	D	
	36.4	52.3	52.4	88.3	15.8	0.0	0.0	0.0	0.0	0.0	8.2	
FOREIGN	134	648	560	682	317	93	142	219	235	74	137	
		U	C	C	C	U	U	C	C	U	U	
	15.5	74.6	64.5	78.5	36.5	10.8	16.4	25.2	27.1	8.0	15.9	
TOTAL	90019	121472	130428	127477	74822	26858	4013	21810	17416	3324	55833	
	A	A	A	A	A	A	A	A	A	A	A	
	34.9	47.1	50.6	49.5	29.0	10.4	1.6	8.5	6.8	1.3	21.7	

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1981
(1 OF 4)

GENERAL AVIATION AVIONICS EQUIPMENT
BY
REGION OF AIRCRAFT BASE
1981

REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKR BEC	GLIDE SLOPE	MLS	NO ILS
ALASKA ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	4765 A	2628 B	1990 B	726 C	2192 B	215 D	5617 A	2265 B	1592 B	1388 8	0 A	5529 A
	61.2	33.8	25.6	9.3	28.2	2.8	72.2	29.1	20.5	17.8	0.0	71.1
CENTRAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	7522 A	6367 A	7640 A	3402 B	9780 A	3399 B	6452 A	8113 A	7828 A	6779 A	0 A	7636 A
	45.8	38.8	46.5	20.7	59.6	20.7	39.3	49.4	47.7	41.3	0.0	46.5
EASTERN ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	12647 A	11391 A	14617 A	4597 A	17102 A	9439 A	9719 A	15744 A	14531 A	12367 A	230 D	10351 A
	46.9	42.3	54.2	17.1	63.5	35.0	36.1	58.4	53.9	45.9	0.9	38.4
EUROPEAN OFFICE ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	14 D	246 C	222 C	48 D	255 C	220 C	54 D	258 C	255 C	220 C	27 D	51 D
	4.8	80.1	72.4	15.8	83.0	71.5	17.6	83.9	83.0	71.5	9.0	16.7
GREAT LAKES ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	24412 A	18219 A	22995 A	9034 A	28447 A	11081 A	20002 A	24454 A	22035 A	17798 A	185 D	22918 A
	50.4	37.6	47.4	18.6	58.7	22.9	41.3	50.5	45.5	36.7	0.4	47.3

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1981
(2 OF 4)

REGION	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LUC	MKR DEC	GLIDE SLOPE	MLS	NO ILS
NEW ENGLAND												
	4404	3172	3789	1330	5347	2274	3009	4331	3898	3709	11	40.2
	B	B	B	B	B	B	B	B	B	B	D	B
ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	52.1	37.5	44.8	15.7	63.2	26.9	35.6	51.2	46.1	43.9	0.1	47.6
NORTHWEST MT.												
	12346	12817	13291	4510	18040	7531	10223	14573	13345	11585	139	128.23
	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	44.0	45.7	47.3	16.1	64.3	26.8	36.4	51.9	47.5	41.3	0.5	45.7
SOUTHERN												
	17592	16402	20858	6421	26313	12671	12106	21982	20092	17897	167	15670
	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	45.5	42.4	53.9	16.6	68.0	32.8	31.3	56.8	52.0	46.3	0.4	40.5
SOUTHWESTERN												
	13895	18626	19570	7312	25801	13631	12039	20890	19531	17947	62	16471
	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	36.8	49.3	51.6	19.4	68.4	36.1	31.9	55.3	51.7	47.5	0.2	43.6
WESTERN-PACIFIC												
	20567	20000	22371	6472	30225	15252	14850	24439	22155	20095	139	20098
	A	A	A	A	A	A	A	A	A	A	D	A
ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF REGION	46.0	44.7	50.0	14.5	67.6	34.1	33.2	54.6	49.5	44.9	0.3	44.9
TOTAL												
	115677	108854	125113	47355	159709	76396	97929	134402	123108	108919	979	116301
	A	A	A	A	A	A	A	A	A	A	B	A
ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF POP	44.9	42.2	48.6	18.4	62.0	29.6	38.0	52.2	47.8	42.3	0.4	45.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
-----		-----	
0 %		10 %	A
10 %		20 %	B
20 %		30 %	C
30 %			D

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION OF BASED AIRCRAFT - CY 1981
(3 OF 4)

REGION	NAVIGATION EQUIPMENT										FLTMGT COMPTK	NU NAVED
	VOR 100CH	VOR 200CH	Z+ KCVR	ADF	DME	RNAV	LXNAV	FLT DIR	RADAR ALT			
ALASKAN												
ESTIMATED POPULATION & STANDARD ERROR	3401 B	2651 B	1587 B	3865 B	560 C	136 D	11 D	136 D	202 D	J D	1605 B	
ESTIMATED % OF REGION	43.7	34.1	20.4	49.7	7.2	1.8	0.1	1.8	2.6	0.6	20.6	
CENTRAL												
ESTIMATED POPULATION & STANDARD ERROR	6356 A	6976 A	7954 A	7899 A	4259 B	1421 B	183 D	860 C	738 C	211 D	3440 B	
ESTIMATED % OF REGION	38.7	42.5	48.4	48.1	25.9	8.7	1.1	5.2	4.5	1.3	21.0	
EASTERN												
ESTIMATED POPULATION & STANDARD ERROR	10289 A	12878 A	15392 A	13651 A	8604 A	2676 B	586 C	2164 B	1765 B	604 C	5078 A	
ESTIMATED % OF REGION	38.2	47.8	57.1	50.7	31.9	9.9	2.2	8.0	6.6	2.2	18.8	
EUROPEAN OFFICE												
ESTIMATED POPULATION & STANDARD ERROR	6 D	253 C	221 C	259 C	220 C	37 D	118 D	145 D	153 C	76 D	50 D	
ESTIMATED % OF REGION	2.0	82.4	71.9	84.4	71.5	12.1	38.5	47.3	49.9	22.9	16.3	
GREAT LAKES												
ESTIMATED POPULATION & STANDARD ERROR	19731 A	21179 A	24086 A	22503 A	12227 A	4442 B	516 C	3272 A	2398 B	546 C	10065 A	
ESTIMATED % OF REGION	40.7	43.7	49.7	46.4	25.2	9.2	1.1	6.8	4.9	1.1	20.8	
NEW ENGLAND												
ESTIMATED POPULATION & STANDARD ERROR	3498 B	3725 B	4220 B	4006 B	1970 B	504 C	42 D	312 D	466 C	61 D	1636 B	
ESTIMATED % OF REGION	41.4	44.1	49.9	47.4	23.3	6.0	0.5	3.7	5.5	0.7	19.3	

STANDARD ERROR		CODE	
-----		----	
GREATER THAN		LESS THAN	
-----		-----	
EQUAL TO		-----	
-----		-----	
0 %		10 %	A
10 %		20 %	B
20 %		30 %	C
30 %			D

TABLE 2-14 GENERAL AVIATION AVIONICS EQUIPMENT BY REGION, OF BASED AIRCRAFT - CY 1981
(4 OF 4)

REGION	NAVIGATION EQUIPMENT										FLTMTG CUMPRK	NU NAVED
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LKNAV	FLT DTK	KADAR ALT			
NORTHWEST MT.	ESTIMATED POPULATION	9653	14107	13948	13984	7628	2129	302	1979	1219	126	5740
	& STANDARD ERROR	A	A	A	A	A	B	D	B	B	D	A
	ESTIMATED % OF REGION	34.4	50.2	49.7	49.8	27.2	7.6	1.1	7.1	4.3	0.5	20.4
SOUTHERN	ESTIMATED POPULATION	12903	19326	21797	21283	12291	4715	395	3405	3025	387	7243
	& STANDARD ERROR	A	A	A	A	A	A	C	A	B	D	A
	ESTIMATED % OF REGION	33.5	50.0	56.4	55.0	31.8	12.2	1.0	8.8	7.8	1.0	18.7
SOUTHWESTERN	ESTIMATED POPULATION	11127	19798	20456	21119	13378	5407	945	4773	3088	692	7929
	& STANDARD ERROR	A	A	A	A	A	A	B	A	A	C	A
	ESTIMATED % OF REGION	29.4	52.4	54.1	55.9	35.4	14.3	2.5	12.6	8.2	1.6	21.0
WESTERN-PACIFIC	ESTIMATED POPULATION	15201	22987	23228	20407	12095	3861	293	2950	2334	342	8619
	& STANDARD ERROR	A	A	A	A	A	B	C	B	B	D	A
	ESTIMATED % OF REGION	34.0	51.4	51.9	45.6	27.0	8.6	0.7	6.6	5.2	0.8	19.3
TOTAL	ESTIMATED POPULATION	90019	121472	130428	127477	74822	26858	4013	21810	17416	3324	55833
	& STANDARD ERROR	A	A	A	A	A	A	A	A	A	A	A
	ESTIMATED % OF POP	34.9	47.1	50.6	49.5	29.0	10.4	1.6	8.5	6.8	1.3	21.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1981 (1 OF 6)

GENERAL AVIATION AVIONICS EQUIPMENT
BY
PRIMARY USE
1981

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MKER BEC	GLIDE SLOPE	MLS	NO ILS
EXECUTIVE ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	5476 A	14196 A	14673 A	621 C	17416 A	14058 A	1692 B	15803 A	15553 A	14940 A	258 C	2916 B
	29.5	76.4	79.0	3.3	93.7	75.7	9.1	85.1	83.7	80.4	1.4	15.7
BUSINESS ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	21148 A	30680 A	37374 A	1249 B	44369 A	27851 A	4378 B	39040 A	38578 A	35613 A	322 D	8730 A
	44.3	64.3	78.3	2.6	93.0	58.4	9.2	81.8	80.9	74.6	0.7	18.3
PERSONAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	59461 A	32792 A	46165 A	12557 A	57015 A	16657 A	41258 A	45694 A	41185 A	32482 A	261 D	49740 A
	62.3	34.3	48.3	13.1	59.7	17.4	43.2	47.8	43.1	34.0	0.3	52.1
INSTRUCTIONAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	7009 A	8423 A	5629 A	726 C	10735 A	2597 B	4502 B	8209 A	5408 A	5182 A	4 D	6837 A
	46.8	56.2	37.5	4.8	71.6	17.3	30.0	54.8	36.1	34.6	0.3	45.6
AERIAL APPLICATION ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	1384 B	812 C	671 C	6137 A	799 C	193 D	7417 A	581 C	476 C	547 C	8 D	7635 A
	17.4	10.2	8.4	76.9	10.0	2.4	93.0	7.3	6.0	6.9	0.1	95.7

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1981 (2 OF 6)

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LUC	MKEM REC	GLIDE SLOPE	MLS	NO ILS
AERIAL OBSERVATION ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	1687	1351	1482	521	2178	1150	1380	1509	1140	1087	0	2019
	49.9	39.9	43.8	15.4	64.4	34.0	40.8	44.6	33.7	32.1	0.3	59.7
OTHER WORK USE ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	838	196	185	550	557	35	1028	133	31	32	3	1452
	56.2	13.2	12.4	37.0	37.4	2.4	69.0	6.9	2.1	2.2	0.0	97.4
COMMUTER AIR CARRIER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	119	1001	887	0	1065	815	21	1048	1024	1032	0	39
	11.7	97.4	86.7	0.0	104.1	79.7	2.1	122.5	100.1	100.9	0.0	3.8
AIR TAXI ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	1665	6024	5575	91	6620	5130	888	6127	5867	5841	1	1318
	23.0	83.4	77.2	1.3	91.6	71.0	12.3	84.8	81.2	60.8	0.3	18.2
OTHER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	1258	2783	1973	1004	3137	1875	1820	2731	2359	2309	63	2173
	26.5	58.7	41.6	21.2	66.2	39.6	38.4	57.6	49.8	48.7	1.3	45.9
RENTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	3443	7169	5740	447	9497	4116	1250	7369	6499	6296	3	3292
	32.5	67.7	54.2	4.2	89.7	38.9	11.8	69.6	61.4	59.5	0.3	31.1
INACTIVE ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	12512	3436	4740	23194	6536	2070	32070	6205	5090	3646	70	32042
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1981 (3 OF 6)

PRIMARY USE	VHF COMMUNICATIONS				TRANSPONDER EQUIPMENT				ILS RECEIVING EQUIPMENT			
	360 CH	720 CH	2+ SYS	NO COMM	4096 CODE	ALT ENC	NO TRANS	LOC	MAKER REC	GLIDE SLOPE	MLS H	NO ILS
TOTAL	115677	108654	125113	47355	159709	76396	97929	134402	123108	108919	979	118301
ESTIMATED POPULATION	A	A	A	A	A	A	A	A	A	A	A	A
% STANDARD ERROR	44.9	42.2	48.6	18.4	62.0	29.6	38.0	52.2	47.8	42.3	0.4	45.9

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1981 (4 OF 6)

PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	RAVAR ALT	FLYING CUMPTK	NO NAVED
EXECUTIVE											
ESTIMATED POPULATION & STANDARD ERROR	4808	13967	15483	16299	14223	7925	1920	8125	7745	1188	814
ESTIMATED % OF USE	25.9	75.2	83.3	87.7	76.5	42.7	10.3	43.7	41.7	6.4	4.4
BUSINESS											
ESTIMATED POPULATION & STANDARD ERROR	17271	33627	39530	39625	29395	10527	674	8125	5463	1208	1200
ESTIMATED % OF USE	36.2	70.5	82.8	83.0	61.6	22.1	1.8	17.0	11.5	2.5	2.5
PERSONAL											
ESTIMATED POPULATION & STANDARD ERROR	45034	41975	47842	41521	16568	3480	391	1528	1219	452	16363
ESTIMATED % OF USE	47.2	43.9	50.1	43.5	17.3	3.6	0.4	1.6	1.3	0.5	17.1
INSTRUCTIONAL											
ESTIMATED POPULATION & STANDARD ERROR	6068	8669	5435	5840	1911	840	37	306	181	4	951
ESTIMATED % OF USE	40.5	57.8	36.3	39.0	12.7	5.6	0.2	2.0	1.2	0.0	6.3
AERIAL APPLICATION											
ESTIMATED POPULATION & STANDARD ERROR	527	757	669	744	305	48	8	70	42	8	6928
ESTIMATED % OF USE	6.6	9.5	8.4	9.3	3.8	0.6	0.1	3.9	0.5	0.1	86.9
AERIAL OBSERVATION											
ESTIMATED POPULATION & STANDARD ERROR	1183	1206	1279	1670	640	226	124	373	236	88	966
ESTIMATED % OF USE	35.0	35.7	37.8	49.4	18.9	6.7	3.7	11.0	7.0	2.6	28.6

STANDARD ERROR		CODE	
GREATER THAN	LESS THAN OR EQUAL TO		
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1981 (5 OF 6)

PRIMARY USE	NAVIGATION EQUIPMENT										NO NAVEQ
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LNAV	FLT DIR	RADAR ALT	FLNGT COMPT	
OTHER BUREAU USE ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	414	172	131	162	34	0	12	16	21	0	953
	0	0	0	0	0	A	0	0	D	A	B
	27.8	11.6	8.8	10.9	2.3	0.0	0.8	1.1	1.5	0.0	64.0
COMPUTER AIR CARRIER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	144	928	945	885	690	155	4	180	180	9	23
	0	0	0	0	0	D	0	0	C	D	D
	14.1	90.7	92.4	86.6	67.5	15.2	0.4	17.7	17.7	0.9	2.3
AIR TAXI ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	1638	5591	5612	6718	4759	1941	228	1659	1051	210	427
	B	A	A	A	A	B	D	B	B	D	C
	22.7	77.4	77.7	93.0	65.9	26.9	3.2	23.0	14.5	2.9	5.9
OTHER ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	864	2674	2030	2599	1653	556	152	739	681	49	1452
	B	B	B	B	B	C	C	B	B	D	B
	18.2	56.4	42.8	54.8	34.9	11.7	3.2	15.6	14.4	1.0	30.6
RENTAL ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	2892	7344	6418	6337	2776	781	62	331	254	39	612
	B	A	A	A	B	C	D	D	D	D	C
	27.3	69.4	60.6	59.9	26.2	7.4	0.6	3.1	2.4	0.4	5.8
INACTIVE ESTIMATED POPULATION & STANDARD ERROR ESTIMATED % OF USE	9563	4577	5111	5245	2031	574	225	497	424	100	24871
	A	A	A	A	B	B	D	C	B	D	A
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-15 GENERAL AVIATION AVIONICS EQUIPMENT BY PRIMARY USE - CY 1981 (6 OF 6)

PRIMARY USE	NAVIGATION EQUIPMENT										
	VOR 100CH	VOR 200CH	2+ RCVR	ADF	DME	RNAV	LRNAV	FLT DIR	KADAK ALT	FLTAGT CUMTCK	NO NAVEW
TOTAL	90019	121472	130428	127477	74822	26858	4013	21810	17410	3324	55833
% ESTIMATED POPULATION	A	A	A	A	A	A	A	A	A	A	A
% STANDARD ERROR	34.9	47.1	50.6	49.5	29.0	10.4	1.6	8.5	6.8	1.3	21.7

NOTE: COLUMN SUMMATIONS MAY DIFFER FROM PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.

STANDARD ERROR		CODE	
GREATER THAN		LESS THAN OR EQUAL TO	
0 %	10 %	A	
10 %	20 %	B	
20 %	30 %	C	
30 %		D	

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (1 OF 13)

MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
OTHER 01	4869.0	866.4	17.8
OTHER 02	1780.3	257.4	14.5
OTHER 03	1188.4	276.5	23.3
OTHER 04	1308.9	286.9	21.9
OTHER 05	805.2	79.2	9.8
OTHER 06	122.4	61.5	50.2
OTHER 07	918.7	226.3	24.6
OTHER 08	554.5	188.5	34.0
OTHER 09	507.8	160.2	31.6
OTHER 10	901.2	142.8	15.8
OTHER 11	874.6	338.2	38.7
OTHER 12	356.0	115.9	32.5
OTHER 13	483.1	90.8	18.8
ADAMS A50S	7.6	2.0	26.8
AEROKSJ2	15.6	3.5	22.6
AEROSPA355	1.2	2.5	213.4
AEROSPA316	428.1	44.8	10.5
AEROSPA341	110.7	17.4	15.8
AGUSTA205	260.6	19.7	7.5
AGUSTA109	15.5	3.5	22.5
AIRPTSA	695.8	89.4	12.8
AIRSPC18	8.4	2.4	28.4
AIRTRCAT300	326.2	43.9	13.5
AMD FALC10	359.2	59.8	16.6

NOTE: SEE FOLLOWING PAGE FOR CODING.

NOTE: OTHER XX REFERS TO ALL GENERAL AVIATION AIRCRAFT BELONGING

TO MANUFACTURER/MODEL GROUPS OF FEWER THAN 20 AIRCRAFT IN

SIZE FOR AIRCRAFT XX WHERE XX STANDS FOR

- 01 FIXED WING PISTON, 1 ENGINE, 1-3 SEATS.
- 02 FIXED WING PISTON, 1 ENGINE, 4+ SEATS.
- 03 FIXED WING PISTON, 2 ENGINE, 1-6 SEATS.
- 04 FIXED WING PISTON, 2 ENGINE 7+ SEATS.
- 05 FIXED WING PISTON, OTHER.
- 06 FIXED WING TURBOPROP, 2 ENGINES, 1-12 SEATS.
- 07 FIXED WING TURBOPROP, 2 ENGINES, 13+ SEATS.
- 08 FIXED WING TURBOPROP, OTHER.
- 09 FIXED WING TURBOJET, 2 ENGINES.
- 10 FIXED WING TURBOJET, OTHER.
- 11 ROTORCRAFT, PISTON.
- 12 ROTORCRAFT, TURBINE.
- 13 OTHER AIRCRAFT.

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (2 OF 13)

MANUFACTURER / MODEL	CONTINUED		
	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
AMD FALC20	908.7	158.7	17.5
AMD FALC50	26.8	5.9	21.9
AMTR TMK	93.3	18.2	19.5
ARCTICS1A	340.3	145.9	42.9
ARCTICS1B1	40.0	7.9	19.4
ARUNCAL5	484.9	143.6	29.6
ARONCA65	314.0	38.5	12.2
ARONCAC3	85.7	7.1	8.2
ARONCAU58	321.8	57.2	17.8
AVIAN#FALCUM	3.0	0.3	8.5
AVIAN#SATWAK	2.4	0.4	18.0
AYRES S4	2067.6	225.5	10.9
BAC 111	402.2	43.9	10.9
BAG B200	95.0	11.1	11.7
BAG DH125	76.4	13.3	17.4
BALWASFIREFY	159.4	26.7	16.7
BEECH 100	694.9	142.4	20.5
BEECH 17	396.0	55.2	13.9
BEECH 18	8894.7	658.3	7.8
BEECH 200	620.9	96.3	15.5
BEECH 23	4782.4	371.1	7.8
BEECH 33	3780.1	277.7	7.3
BEECH 35	21029.7	1492.8	7.1
BEECH 36	1501.5	197.0	13.1
BEECH 45	1235.5	133.2	10.8

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (3 OF 13)

MANUFACTURER / MODEL	CONTINUED		PERCENT STANDARD ERROR
	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	
BECH 50	1999.7	531.6	26.6
BECH 55	4195.3	441.1	10.5
BECH 56	100.6	12.1	12.1
BECH 58	1673.9	202.9	12.1
BECH 60	500.3	110.9	22.2
BECH 65	670.6	74.3	11.1
BECH 76	163.7	24.9	18.3
BECH 77	151.3	31.8	21.0
BECH 80	1296.1	212.3	16.4
BECH 90	3790.8	620.8	16.4
BECH 95	1623.0	155.9	9.6
BECH 99	898.9	153.5	17.1
BELL 204	859.0	193.0	22.5
BELL 206	6506.9	1138.3	17.5
BELL 212	154.0	81.3	52.8
BELL 222	13.8	4.3	30.8
BELL 412	6.5	0.0	0.0
BELL 47	8614.6	1160.0	13.5
BLANCA11	1578.9	99.0	6.3
BLANCA1413	713.5	225.0	31.5
BLANCA1419	588.4	67.3	11.4
BLANCA17	1096.3	98.5	9.0
BLANCA7	12446.7	857.7	6.9
BLANCA8	388.5	55.2	14.2
BRUM BN2	588.7	58.7	10.0

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (4 OF 13)

CONTINUED			
MANUFACTURER / MODEL	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	PERCENT STANDARD ERROR
BOEING707	2397.7	128.2	5.3
BOEING720	634.5	128.2	20.2
BOEING727	1762.6	107.9	6.1
BOEING737	267.0	125.6	47.1
BOEING75	6832.0	1050.3	15.4
BOLKMS105	240.2	53.1	22.1
BRAEKODH125	587.1	84.9	14.5
BRASOVIS26	19.6	4.1	20.9
BRWSTREFLEET2	61.3	4.7	7.7
BRWSTREFLEET7	111.0	23.9	21.5
BUKER 131	40.6	3.8	9.2
CANCOMODELO	16.8	10.7	63.5
CESSNA120	2246.4	206.7	9.2
CESSNA140	6333.9	498.6	7.9
CESSNA150	49951.5	2034.7	4.1
CESSNA170	6305.3	336.7	5.3
CESSNA172	50657.6	2758.2	5.4
CESSNA175	2739.1	201.6	7.4
CESSNA177	4966.0	718.0	14.5
CESSNA180	7738.9	765.3	9.9
CESSNA182	24257.2	2276.7	9.4
CESSNA185	2470.8	462.6	18.7
CESSNA186	3517.9	788.9	22.4
CESSNA190	208.6	20.2	9.7
CESSNA195	1361.6	78.7	5.8

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (5 OF 13)

MANUFACTURER / MODEL	CONTINUED		PERCENT STANDARD ERROR
	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	
CESSNA206	4183.9	409.8	9.8
CESSNA207	849.3	316.1	37.2
CESSNA210	8925.2	651.8	7.3
CESSNA305	1310.7	164.0	12.5
CESSNA310	9609.7	605.7	6.3
CESSNA320	1044.2	144.8	13.9
CESSNA335	24.3	4.0	16.2
CESSNA336	254.6	44.2	17.3
CESSNA337	1930.5	179.3	9.3
CESSNA340	901.9	136.6	15.1
CESSNA401	959.6	98.5	10.3
CESSNA402	2319.3	548.4	23.6
CESSNA404	248.6	62.0	24.9
CESSNA411	756.6	79.8	10.5
CESSNA414	785.6	165.6	21.1
CESSNA421	2154.3	228.9	10.6
CESSNA425	13.3	3.2	24.1
CESSNA441	113.7	23.0	20.2
CESSNA500	642.5	112.2	17.5
CESSNA500	229.8	45.7	19.9
CESSNAUC94	89.5	4.9	5.5
CHILD S2	52.5	12.4	23.6
COMETH105	244.2	76.8	31.4
COMAERLA4	365.8	61.1	16.7
CURTISC46	1082.9	189.0	17.5

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (6 OF 13)

MANUFACTURER / MODEL	CONTINUED			PERCENT STANDARD ERROR
	HOURS ESTIMATE CIN THOUSANDS	STANDARD ERROR CIN THOUSANDS		
CURTISW	29.6	4.6		15.6
CURTISWAIN	62.0	25.3		40.8
CURTISWAIN	657.3	137.9		21.0
CVAC 22	488.1	45.6		9.3
CVAC 240	589.1	177.3		30.1
CVAC 340	491.4	95.3		19.4
CVAC BT13	275.2	25.3		9.2
CVAC L13	31.7	8.7		27.4
CVAC STCS86	268.1	111.2		41.5
DANT 6	24.8	1.1		4.3
DHAV DMC1	324.6	41.1		12.7
DHAV DMC2	2109.9	216.9		10.3
DHAV DMC6	1696.3	380.0		22.4
DHAVXDM82	268.2	30.6		11.4
DOUG A26	243.8	24.9		10.2
DOUG DC3	885.2	3161.4		35.6
DOUG DC4	1607.1	265.9		16.5
DOUG DC6	4329.4	908.6		21.0
DOUG DC7	848.1	90.1		10.6
DOUG DC8	2200.8	64.7		2.9
DOUG DC9	545.5	148.8		27.3
EIKVOM20	32.5	7.7		23.9
EWALK M41	37.7	2.9		7.8
EMB 110	74.2	19.3		26.1
ENSTW28	600.4	162.5		27.1

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (7 OF 13)

MANUFACTURER / MODEL	CONTINUED			PERCENT STANDARD ERROR
	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)		
FLEET 100	28.7	3.4		11.8
FRCHLD24	500.6	41.9		8.4
FRCHLDC119	207.4	0.8		0.4
FRCHLDP27	462.0	126.2		27.3
FRCHLDM02	413.8	58.4		14.1
GENBALAX0	6.2	0.7		11.5
GLASFLLIP0LL	107.6	45.4		24.2
GRUB ASTIK	12.0	1.6		13.5
GRTLAS2T1	144.9	76.2		52.6
GRUMANT0M	77.4	3.6		4.7
GRUMAVAA1	348.9	76.7		9.0
GRUMAVAA5	1219.5	109.3		9.0
GRUMAVG104	1664.3	126.5		7.6
GRUMAVG21	579.7	107.4		18.5
GULSTM112	656.2	74.2		11.3
GULSTM500	1470.4	192.4		13.1
GULSTM520	185.7	18.6		10.0
GULSTM500	764.1	92.7		12.1
GULSTM080	1935.9	354.5		18.3
GULSTM080TP	531.4	71.2		13.4
GULSTM090TP	431.5	73.9		17.1
GULSTMAA1	800.9	60.1		7.5
GULSTMAA5	933.9	122.5		13.1
GULSTMGL159	768.6	108.4		14.1
GULSTMGL159	1159.6	88.9		7.7

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (8 OF 13)

MANUFACTURER / MODEL	CONTINUED			PERCENT STANDARD ERROR
	HOURS ESTIMATE LIN THOUSANDS	STANDARD ERROR LIN THOUSANDS		
GULSTM644	412.0	46.4		11.2
GULSTM673	222.2	29.9		13.5
GULSTM6A7	39.9	5.2		13.1
HELIO H250	47.1	5.5		11.7
HELIO H295	220.5	31.3		14.2
HELIO H391	53.8	5.8		10.7
HELIO H395	56.8	5.9		10.4
HILLELHFI1100	160.4	40.4		25.2
HILLELHFI12	2887.6	433.5		15.0
HUGHES269	2977.5	984.7		33.1
HUGHES369	1333.3	148.1		14.3
HWSLYDH104	133.5	35.2		26.4
HWSLYDH125	152.2	16.0		10.5
HYNES 62	159.0	7.8		4.9
ISRAEL1121	489.8	49.1		10.0
ISRAEL1124	178.0	33.0		18.5
JBMSTR0GAL5	137.1	20.6		15.0
KUNLOW0	583.1	94.9		16.3
LAIKFN10	23.5	2.8		12.0
LEAR 23	408.6	43.8		10.7
LEAR 24	852.5	140.1		16.4
LEAR 25	778.9	125.3		16.1
LEAR 35	496.4	54.3		10.9
LET L13	127.8	13.9		10.9
LKHELD1329	723.9	124.8		17.2

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (9 OF 13)

MANUFACTURER / MODEL	CONTINUED		PERCENT STANDARD ERROR
	HOURS ESTIMATE LIN THOUSANDS	STANDARD ERROR LIN THOUSANDS	
LKHEED18	979.8	159.6	16.3
LKHEEDPVL	93.2	28.4	30.5
LKHEEDT33	241.9	54.5	22.5
LUSCOM8	4696.0	310.3	6.6
MARTIN404	813.7	0.0	0.0
MAULE M4	349.5	38.5	11.0
MAULE M5	507.8	106.7	21.0
MCLISHFUNK8	175.7	18.8	10.7
MEYERSUTM	98.4	15.2	15.5
MNCUP90	115.3	27.8	24.1
MNRITEM18	142.5	18.3	12.8
MUNELYM20	10284.4	601.0	5.8
MRCHTIS205	40.9	2.1	5.1
MTSBSIMJ2	1031.9	174.6	16.9
MULTICU16	136.8	23.8	17.4
NAMER B25	239.4	32.7	13.7
NAMER F51	212.2	34.4	16.2
NAMER NA260	156.1	10.0	6.4
NAMER T6	2701.1	363.3	13.4
NAVAL M3M	1074.1	108.8	10.1
NAVIONNAVION	1461.3	84.0	5.7
WORD SV4	58.2	7.8	13.5
URLHELH19	123.0	13.6	11.1
PICARDAD8	41.0	5.2	12.6
PILATSB4	15.4	2.7	17.5

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (10 OF 13)

MANUFACTURER / MODEL	CONTINUED			PERCENT STANDARD ERROR
	HOURS ESTIMATE LIN THOUSANDS	STANDARD ERROR LIN THOUSANDS		
PIPER 60C	150.2	26.2		17.5
PIPER J2	85.2	5.9		6.9
PIPER J3	12470.0	961.9		7.7
PIPER J4	421.3	122.3		29.0
PIPER J5	751.4	79.7		10.6
PIPER PA12	2899.4	213.0		7.4
PIPER PA14	268.1	14.0		5.2
PIPER PA15	257.1	31.5		12.3
PIPER PA16	721.1	55.1		7.6
PIPER PA17	197.7	38.9		19.7
PIPER PA18	8481.2	1080.8		12.7
PIPER PA20	948.2	135.8		14.3
PIPER PA22	12336.3	1253.1		10.2
PIPER PA23	11143.9	728.5		6.5
PIPER PA24	8649.8	316.5		3.7
PIPER PA25	3955.2	361.0		9.1
PIPER PA28	45454.1	1456.4		3.2
PIPER PA30	6358.9	2164.0		34.0
PIPER PA31	4376.9	446.3		10.2
PIPER PA31T	474.4	101.4		21.4
PIPER PA32	7280.4	750.0		10.3
PIPER PA34	2648.8	295.5		11.2
PIPER PA36	399.9	61.0		15.3
PIPER PA38	1400.0	167.9		11.5
PIPER PA42	14.9	3.3		22.4

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (11 OF 13)

MANUFACTURER / MODEL	CONTINUED		PERCENT STANDARD ERROR
	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)	
PIPER PA44	226.4	28.8	12.7
PROPTJ200	144.7	13.4	9.3
KANKIMO5	146.7	8.0	5.4
MAVERA MX6	24.5	3.8	15.6
MAVERA S50	20.3	3.8	18.5
MAVERA S55	84.4	13.5	16.0
MAVERA S60	5.4	1.6	28.9
REBELLS00	56.8	5.8	10.1
REBELLS00TP	159.0	17.7	11.1
REBELLS700	13.1	2.7	20.8
REBELLSA265	1404.7	220.9	15.7
RUSSINK20	55.9	15.1	27.0
KULSCHLS	19.4	4.3	22.3
RYAN STJ	427.5	41.1	9.6
RYAN STA	59.2	9.9	16.8
SCHLEKASIS	24.7	2.1	8.7
SCHLEKAS019	11.3	1.8	16.1
SCHLEKAS020	10.8	3.2	29.3
SCHLEKAS0	19.6	4.1	21.2
SCHLEKAS0	66.9	10.7	16.0
SCHLEKAS0104	2380.1	347.6	14.6
SCHLEKAS01	489.8	76.2	15.6
SCHLEKAS02	1039.9	177.7	17.1
SEMCU CLMGM	8.2	2.8	34.2
SEMCU MUDELT	5.1	0.6	11.9

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (12 OF 13)

MANUFACTURER / MODEL	CONTINUED			PERCENT STANDARD ERROR
	HOURS ESTIMATE (IN THOUSANDS)	STANDARD ERROR (IN THOUSANDS)		
SKRSKY55	447.0	118.0		26.4
SKRSKY58	392.6	52.0		13.3
SKRSKY58T	149.8	15.9		10.6
SKRSKY76	71.3	18.0		25.2
SLINDS100	455.2	61.4		13.5
SMITH 600	404.7	70.0		17.3
SMIAS 350	105.9	9.6		9.1
SMIAS SA318	176.4	23.8		13.5
SOCATAMS894	30.5	3.3		10.9
SUCATARALLYE	16.2	2.9		18.1
SPRTHCIRKUS	86.2	15.6		18.1
SPRTHMIMBUS	16.6	1.6		9.5
STBRDSSD3	76.6	4.3		5.6
SINSON10	304.4	28.7		9.4
SINSON15	312.2	158.4		50.7
SINSONSR9	63.0	3.3		5.3
SINSONV77	113.1	16.6		14.7
STOLAMKC3	256.4	28.6		11.2
SUPAC LA	194.2	65.1		33.5
SUPAC V	24.3	1.7		7.0
SWRNGNSA226	506.3	58.3		11.5
SWRNGNSA26	499.0	29.5		5.9
TCRAFTA	47.7	3.0		6.3
TCRAFTBC	3600.8	258.0		7.2
TCRAFTBF	84.3	4.6		5.4

TABLE 2-16 GENERAL AVIATION LIFETIME AIRFRAME HOURS BY AIRCRAFT MANUFACTURER/MODEL
CY 1981 (13 OF 13)

MANUFACTURER / MODEL	CONTINUED			PERCENT STANDARD ERROR
	HOURS ESTIMATE LIN THOUSANDS	STANDARD ERROR LIN THOUSANDS		
TCRAFTBL	432.0	53.6		12.4
TEMCO 11A	40.3	2.9		7.1
THUNDERA17	7.0	0.8		11.7
TIMPSONNAVION	753.8	87.4		11.6
TOMCAT47BELL	45.1	5.9		13.0
TRYTEKA	40.9	3.7		9.2
UNIVACGC1	1166.9	99.8		8.6
UNIVARI108	4149.5	485.5		11.7
UNIVAR415	4854.8	763.5		15.7
VARGA 2150	101.5	25.7		25.4
VICKER745	504.9	39.7		7.9
WACO ASO	85.1	19.3		22.7
WACO GKE	35.8	3.0		8.3
WACO K	46.4	4.2		9.1
WACO U	54.2	1.7		3.1
WACO UPF7	551.2	46.8		8.5
WACU YK	103.8	5.9		5.7
WAGNER65	733.6	16.1		2.2
WIMRLY201	187.8	58.5		31.2
TOTAL AIRCRAFT	573589.	7606.6		1.3

TABLE 2-17 GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES BY ENGINE MANUFACTURER/MODEL
GROUP - CY 1981 (1 OF 3)

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
ALLSM 250C	2245	2.41	97.11	527	11.00
ALLSM 501U	80	8.38	81.26	443	26.12
AMTACMCCULH	171	29.06	36.16	26	38.46
ANSRCHTF731	356	0.00	100.00	449	10.88
ANSRCHTF731	628	6.79	85.86	394	8.31
CONT 6285	108	0.00	100.00	228	24.33
CONT 975	1	367.59	5.73	730	0.00
CONT A40	12	101.98	9.99	11	11.81
CONT A50	4	113.00	10.64	185	0.00
CONT A65	5226	5.25	52.42	53	9.26
CONT A75	1351	10.41	62.42	48	11.50
CONT A80	9	154.69	10.87	45	0.00
CONT C125	214	27.00	53.58	61	34.19
CONT C145	1812	7.62	79.17	122	49.10
CONT C85	4228	4.85	66.80	69	15.67
CONT C90	1716	9.15	64.91	61	18.71
CONT E185	1753	6.98	81.80	66	12.69
CONT E225	1322	7.56	85.58	83	12.92
CONT U200	13208	2.56	84.97	180	8.56
CONT U300	6967	3.00	86.19	96	9.53
CONT U346	331	3.30	98.87	129	35.35
CONT U360	3538	4.19	91.81	170	10.53
CONT U47C	24819	1.36	90.31	146	3.70
CONT U520	27033	1.01	93.91	221	3.13
CONT K670	559	15.77	53.28	54	18.96
DNAAAGIPSY	66	13.89	65.70	52	17.52
FCD 6440	152	16.02	53.70	85	42.23
FRMLN4AC150	5	110.52	24.14	33	16.48
FRMLN4AC176	38	58.50	20.36	79	18.00
FRMLN4AC194	44	36.94	26.57	37	19.04
FRMLN6AV350	219	6.66	90.36	53	18.31
FRMLN6VS335	61	17.17	91.89	16	23.36
GE CF700	398	7.23	86.18	520	6.47
GE CJ610	877	2.66	95.73	396	7.72
GE CJ805	15	30.87	22.22	130	25.33
GE CT58	0	0.00	0.00	0	0.00
GLADENK5	2	206.59	4.86	17	19.85
GLADENK5	90	32.38	48.46	61	13.49
JACOBPM755	264	15.56	60.47	140	26.50
JACUBSK755	123	20.64	32.01	46	22.23

TABLE 2-17 GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES BY ENGINE MANUFACTURER/MODEL GROUP - CY 1981 (2 OF 3)

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
JACOBSSR915	38	25.90	50.20	93	28.72
LYC LTS101	57	11.34	88.86	384	31.59
LYC 0145	368	19.66	44.29	78	22.72
LYC 0235	10027	2.63	85.62	320	7.36
LYC 0290	2105	8.18	62.69	65	10.57
LYC 0320	34958	1.36	88.09	184	5.24
LYC 0340	77	42.06	55.29	29	7.35
LYC 0360	25942	0.98	94.75	169	4.30
LYC 0435	1240	8.10	75.95	243	19.63
LYC 0480	1167	9.62	72.46	151	11.43
LYC 0540	21628	1.15	93.31	245	3.63
LYC 0541	1143	1.61	98.98	195	10.91
LYC 0720	214	13.01	92.16	231	33.73
LYC R680	265	21.49	39.91	39	29.66
LYC T53	54	6.20	86.25	449	13.73
MNASCUC4	12	26.28	55.70	20	10.13
ONAN B48	19536	2.24	73.80	283	4.00
PCKARDV1650	59	38.18	53.58	66	34.32
PWA JT12	728	0.00	100.00	440	5.10
PWA JT15	611	4.97	94.22	404	6.91
PWA JT3C	4	106.76	6.36	8	0.00
PWA JT3D	176	11.13	47.22	253	13.58
PWA JT4	26	23.86	19.11	135	23.78
PWA JT8	231	5.84	87.96	629	14.99
PWA JT9	0	0.00	0.00	0	0.00
PWA PT6	3484	0.61	99.46	471	4.56
PWA PT6T	116	0.00	100.00	370	16.85
PWA K1340	1883	5.86	81.92	367	6.90
PWA K1830	337	16.64	53.60	234	18.48
PWA K2000	27	54.28	15.14	133	11.73
PWA K2600	272	24.69	32.89	131	10.22
PWA R985	1980	8.75	47.99	279	12.13
RROYCEDART	412	4.88	88.81	426	7.47
RROYCEGIPSY	0	0.00	0.00	0	0.00
RROYCERB211	26	0.00	100.00	204	0.00
RROYCESPEY	400	1.78	99.12	423	9.00
RROYCEVIPER	222	2.13	98.11	403	5.81
TMECA ANTSTJ	98	7.43	95.73	700	19.54
TMECA AST14T	20	9.92	92.47	743	22.26
TMECA AST18	22	0.00	100.00	730	10.64
TMECA AST2T	35	10.69	96.11	331	6.38

TABLE 2-17 GENERAL AVIATION MEAN HOURS AND ACTIVE ENGINES BY ENGINE MANUFACTURER/MODEL GROUP - CY 1981 (3 OF 3)

ENGINE MANUFACTURER/ MODEL GROUP	ESTIMATE OF ACTIVE POPULATION	PERCENT STANDARD ERROR	ESTIMATE OF PERCENT ACTIVE	ESTIMATE OF MEAN HOURS	PERCENT STANDARD ERROR
TECA AST3	26	27.08	63.64	313	16.50
WARNER165	38	40.57	26.99	30	24.86
WARNER185	22	18.55	95.45	7	42.47
WARNER50	60	36.68	33.38	52	22.19
WRIGHTJ5	0	718.60	1.11	15	0.00
WRIGHTK760	36	49.32	36.24	158	33.84
WRIGHTK975	46	52.05	57.78	60	0.00
ALL ENGINES	40081	0.08	13.74	204	1.40

NOTE: ENGINE MANUFACTURER/MODEL GROUPS FOR WHICH
SEPARATE ESTIMATES ARE NOT AVAILABLE ARE NOT
LISTED IN THE TABLE, BUT ARE INCLUDED IN THE
"ALL ENGINES" ESTIMATES.

TABLE 2-18 GENERAL AVIATION FUEL CONSUMED BY TYPE OF AIRCRAFT - CY 1981

AIRCRAFT TYPE	MEAN RATE GPH	ESTIMATED FUEL USE(mil gal)	STANDARD ERROR(mil gal)
FIXED WING			
PISTON			
1 ENG 1-3 SEATS	8.01	81.61	3.3
1 ENG 4+ SEATS	11.00	192.56	4.8
TOTAL 1 ENG	9.90	274.17	5.9
2 ENG 1-6 SEATS	26.01	93.81	3.8
2 ENG 7+ SEATS	35.72	98.67	5.5
TOTAL 2 ENG	30.22	192.48	6.7
OTHER PISTON	263.08	6.99	1.8
TOTAL PISTON	13.90	473.64	9.1
TURBOPROP			
2 ENG 1-12 SEATS	75.51	117.01	5.4
2 ENG 13+ SEATS	166.52	90.33	8.0
TOTAL 2 ENG	99.11	207.34	9.7
OTHER TURBOPROP	118.81	7.43	1.6
TOTAL TURBOPROP	99.68	214.77	9.8
TURBOJET			
2 ENG	300.89	372.52	17.9
OTHER	763.70	114.03	12.9
TOTAL TURBOJET	350.70	486.55	22.0
TOTAL FIXED WING	31.23	1174.96	25.8
ROTORCRAFT			
PISTON	15.17	14.12	1.7
TURBINE	32.76	57.47	5.0
TOTAL ROTORCRAFT	26.66	71.59	5.3
UTHER	2.09	0.82	0.1
TOTAL AIRCRAFT	30.65	1247.37	26.3
TOTAL JET FUEL	143.27	758.79	24.6
TOTAL AVIATION GASOLINE	13.80	488.58	9.3

TABLE 2-19 NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS - CY 1981 (1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS	
L	ESTIMATE	266	370	4742	9085	2	21	1126	394	16005
	% STD ERR	41.5	33.3	9.5	7.0	*	*	20.0	32.7	5.1
	ROW %	1.7	2.3	29.6	56.8	0.0	0.1	7.0	2.5	
	COLUMN %	0.6	2.9	11.3	11.3	0.2	3.1	7.2	0.7	6.2
L,MB	ESTIMATE	9	41	1025	9557	0	0	987	593	12213
	% STD ERR	*	*	20.0	7.0	0.0	0.0	22.7	28.8	6.1
	ROW %	0.1	0.3	8.4	78.3	0.0	0.0	8.1	4.9	
	COLUMN %	0.0	0.3	2.4	11.9	0.0	0.0	6.3	1.0	4.7
L,MB,GS	ESTIMATE	209	278	1068	34116	378	338	11301	41987	89675
	% STD ERR	*	38.1	20.5	3.3	33.9	35.2	6.3	2.4	1.4
	ROW %	0.2	0.3	1.2	38.0	0.4	0.4	12.6	46.8	
	COLUMN %	0.5	2.2	2.5	42.6	41.2	49.3	72.5	70.9	34.8
L,MB,GS,KA	ESTIMATE	0	0	120	502	1	2	388	15497	16510
	% STD ERR	0.0	0.0	*	24.2	*	*	35.7	3.2	3.2
	ROW %	0.0	0.0	0.7	3.0	0.0	0.0	2.4	93.9	
	COLUMN %	0.0	0.0	0.3	0.6	0.1	0.3	2.5	26.2	6.4
LRN	ESTIMATE	233	117	259	228	81	25	109	2962	4014
	% STD ERR	48.6	*	39.5	34.3	*	*	*	7.3	7.4
	ROW %	5.8	2.9	6.5	5.7	2.0	0.6	2.7	73.8	
	COLUMN %	0.5	0.9	0.6	0.3	8.8	3.6	0.7	5.0	1.0
RA	ESTIMATE	245	12	187	665	34	5	600	15668	17416
	% STD ERR	41.8	7.1	44.9	21.2	*	*	28.5	3.2	3.2
	ROW %	1.4	0.1	1.1	3.8	0.2	0.0	3.4	90.0	
	COLUMN %	0.5	0.1	0.4	0.8	3.7	0.7	3.8	26.5	6.8
ML	ESTIMATE	0	0	92	140	0	8	34	705	980
	% STD ERR	0.0	0.0	*	*	0.0	*	*	21.5	19.5
	ROW %	0.0	0.0	9.4	14.3	0.0	0.8	3.5	71.9	
	COLUMN %	0.0	0.0	0.2	0.2	0.0	1.2	0.2	1.2	0.4
L,MB,GS,ML	ESTIMATE	0	0	6	133	0	0	34	609	782
	% STD ERR	0.0	0.0	*	*	0.0	0.0	*	22.1	21.0
	ROW %	0.0	0.0	0.8	17.0	0.0	0.0	4.3	77.9	
	COLUMN %	0.0	0.0	0.0	0.2	0.0	0.0	0.2	1.0	0.3

TABLE 2-19 NON-HIERARCHICAL VS. HIERARCHICAL CAPABILITY GROUPS - CY 1981 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
LKN,ML									
ESTIMATE	0	0	6	0	0	0	0	323	329
% STD ERR	0.0	0.0	*	0.0	0.0	0.0	0.0	33.1	32.6
KOM %	0.0	0.0	1.8	0.0	0.0	0.0	0.0	98.2	
COLUMN %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1
NO GROUP									
ESTIMATE	45726	11826	34749	26751	422	314	1781	555	122125
% STD ERR	1.9	5.0	3.0	3.9	34.1	37.4	16.8	28.2	1.0
KOM %	37.4	9.7	28.5	21.9	0.3	0.3	1.5	0.5	
COLUMN %	98.5	93.6	82.7	33.4	46.0	45.8	11.4	0.9	47.4
ALL CRAFT									
ESTIMATE	46439	12632	42035	80137	917	686	15587	59206	257686
% STD ERR	1.9	4.8	2.6	1.8	22.7	24.6	5.3	1.7	
RDW %	18.0	4.9	16.3	31.1	0.4	0.3	6.0	23.0	

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

SEE TABLE 2-20 FOR HIERARCHICAL CAPABILITY GROUP KEY
AND TABLE 2-25 FOR NON-HIERARCHICAL CAPABILITY GROUP KEY

TABLE 2-20 HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1981 (1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
EXECUTIVE	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	503 30.0 2.6 1.1	356 35.5 1.9 2.8	1253 19.6 6.6 3.0	2937 12.3 15.4 3.7	118 * 0.6 12.9	826 22.3 4.3 5.3	12984 4.1 68.0 21.9	19093 3.8 7.4
BUSINESS	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	950 21.2 1.9 2.0	578 25.4 1.2 4.6	3168 12.0 6.5 7.5	16194 5.1 33.2 20.2	299 43.1 0.6 32.6	3378 12.1 6.9 21.7	24157 3.6 43.6 40.8	48732 2.5 18.9
PERSONAL	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	12422 4.3 12.6 26.7	5022 7.4 5.1 39.8	24256 3.7 24.7 57.7	39865 3.0 40.6 49.7	114 * 0.1 12.4	6178 8.7 6.3 39.6	10349 6.4 10.5 17.5	98215 1.4 38.1
INSTRUCT.	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	576 23.3 3.8 1.2	400 33.5 2.6 3.2	3653 11.5 24.0 8.7	8008 7.6 52.6 10.0	150 * 1.0 16.4	1063 22.6 7.0 6.8	1328 18.6 8.7 2.2	15234 5.2 5.9
AERIAL AP.	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	6131 4.4 74.7 13.2	857 20.9 10.4 6.8	506 25.3 6.2 1.2	521 28.6 6.3 0.7	0 0.0 0.0 0.0	73 * 0.9 0.5	120 * 1.5 0.2	8208 3.9 3.2
AERIAL OBS	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	476 28.6 13.4 1.0	584 25.1 16.4 4.6	506 30.9 14.2 1.2	840 23.5 23.6 1.0	45 * 1.3 4.9	585 30.5 16.5 3.8	461 29.6 13.0 0.8	3555 11.0 1.4
OTHER WORK	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	550 26.0 34.7 1.2	388 27.5 24.5 3.1	239 38.7 15.1 0.6	370 36.8 23.4 0.5	0 0.0 0.0 0.0	0 0.0 0.0 0.0	18 * 1.1 0.0	1584 15.4 0.6
COMPUTER	ESTIMATE \$ STD ERR ROM \$ COLUMN \$	0 0.0 0.0 0.0	23 * 2.1 0.2	0 0.0 0.0 0.0	248 34.5 22.9 0.3	0 0.0 0.0 0.0	189 40.7 17.4 1.2	624 17.9 57.5 1.1	1085 14.2 0.4

TABLE 2-20 HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1981 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
AIR TAXI	ESTIMATE % STD ERR ROW % COLUMN %	1568 15.7 21.2 12.6	127 * 1.7 0.3	570 29.2 7.6 0.7	0 0.0 0.0 0.0	334 32.9 4.5 48.7	494 28.2 8.6 3.2	4298 9.2 57.3 7.3	7504 6.9 2.9
UTHER	ESTIMATE % STD ERR ROW % COLUMN %	921 18.9 18.6 2.0	630 24.0 12.7 1.5	1060 19.1 21.4 1.3	81 * 1.6 8.8	0 0.0 0.0 0.0	230 39.3 4.6 1.5	1559 14.2 31.5 2.6	4949 8.1 1.9
RENTAL	ESTIMATE % STD ERR ROW % COLUMN %	391 30.2 3.6 0.8	631 28.2 5.9 1.5	5339 9.8 49.7 6.7	55 * 3.5 6.0	0 0.0 0.0 0.0	1811 16.9 16.9 11.6	2249 14.6 20.9 3.8	10745 6.6 4.2
INACTIVE	ESTIMATE % STD ERR ROW % COLUMN %	23420 3.4 59.9 50.4	7166 7.4 18.3 17.0	4244 10.4 10.9 5.3	71 49.6 0.2 7.7	55 * 0.1 8.0	728 25.6 1.9 4.7	1259 16.7 3.2 2.1	39107 2.7 15.2
TOTALS	ESTIMATE % STD ERR ROW %	40439 1.9 18.0	42035 2.6 16.3	80137 1.8 31.1	917 22.7 0.4	686 24.6 0.3	15587 5.3 6.0	59206 1.7 23.0	257686

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR RNAV	
4. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
4096 CODE TRANSPONDER	TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
	4096 CODE TRANSPONDER
	VOR OR RNAV
	DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-21 HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1981 (1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
1-49	ESTIMATE % STD ERR ROW % COLUMN %	3195 9.8 6.4 25.3	14916 5.1 30.1 35.5	16246 5.2 32.7 20.3	87 % 0.2 9.5	11 % 0.0 1.6	1617 16.6 3.3 10.4	3592 10.6 7.2 6.1	49617 2.6 19.3
50-99	ESTIMATE % STD ERR ROW % COLUMN %	2240 12.7 4.8 17.7	8759 7.1 18.8 20.8	19659 4.7 42.3 24.5	67 % 0.1 7.3	85 % 0.2 12.4	2991 12.9 6.4 19.2	8017 7.2 17.2 13.5	46504 2.8 18.0
100-149	ESTIMATE % STD ERR ROW % COLUMN %	1409 16.4 4.3 11.2	3744 11.2 11.4 8.9	12796 6.0 39.1 16.0	50 % 0.2 5.5	23 % 0.1 3.4	2923 13.3 8.9 18.8	10267 6.2 31.4 17.3	32722 3.5 12.7
150-199	ESTIMATE % STD ERR ROW % COLUMN %	551 28.1 3.1 4.4	1467 18.0 8.2 3.5	6381 8.8 35.5 8.0	144 % 0.8 15.7	64 % 0.4 9.3	1344 18.4 7.5 8.6	7103 7.6 39.5 12.0	17988 4.9 7.0
200-249	ESTIMATE % STD ERR ROW % COLUMN %	538 26.9 3.0 4.3	1454 18.2 8.1 3.5	5558 9.2 30.9 6.9	165 % 0.9 18.0	114 % 0.6 16.6	1519 17.8 8.4 9.7	7343 7.3 40.8 12.4	17987 4.8 7.0
250-299	ESTIMATE % STD ERR ROW % COLUMN %	227 41.3 2.5 1.8	589 28.6 6.5 1.4	2605 14.0 28.7 3.3	146 % 1.6 15.9	47 % 0.5 0.9	817 24.4 9.0 5.2	3930 10.1 43.2 6.6	9091 6.9 3.5
300-349	ESTIMATE % STD ERR ROW % COLUMN %	407 31.7 4.6 3.2	744 25.4 8.4 1.8	2728 13.9 30.9 3.4	0 0.0 0.0 0.0	74 % 0.8 10.8	541 29.0 6.1 3.5	3463 10.1 39.2 5.8	8842 6.9 3.4
350-399	ESTIMATE % STD ERR ROW % COLUMN %	229 37.9 3.4 1.8	344 38.7 5.1 0.8	1634 18.2 24.4 2.0	113 % 1.7 12.3	0 0.0 0.0 0.0	527 32.9 7.9 3.4	3247 10.5 48.4 5.5	6710 8.0 2.6

TABLE 2-21 HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1981 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
400-449	ESTIMATE	461	522	1558	0	23	468	2467	5575
	% STD ERR	29.3	30.7	18.6	0.0	*	33.4	11.8	8.8
	ROM %	8.3	9.4	27.9	0.0	0.4	8.4	44.3	
	COLUMN %	1.0	1.2	1.9	0.0	3.4	3.0	4.2	2.2
450 UP	ESTIMATE	1824	2333	6723	90	162	2074	8680	23495
	% STD ERR	13.4	14.6	8.5	*	50.0	15.8	5.8	3.9
	ROM %	7.8	9.9	28.6	0.4	0.7	8.8	36.9	
	COLUMN %	3.9	5.6	8.4	9.8	23.6	13.3	14.7	9.1
INACTIVE	ESTIMATE	23420	7166	4244	71	55	728	1259	39107
	% STD ERR	3.4	7.4	10.4	49.6	*	25.6	16.7	2.7
	ROM %	59.9	18.3	10.9	0.2	0.1	1.9	3.2	
	COLUMN %	50.4	17.0	5.3	7.7	8.0	4.7	2.1	15.2
TOTALS	ESTIMATE	46439	42035	80137	917	686	15587	59206	257686
	% STD ERR	1.9	2.6	1.8	22.7	24.6	5.3	1.7	
	ROM %	18.0	16.3	31.1	0.4	0.3	6.0	23.0	

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR RNAV	
4. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
4096 CODE TRANSPONDER	TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
5. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	VOR OR RNAV
VOR OR ADF OR RNAV	DME
6. TWO-WAY COMMUNICATIONS	
4096 CODE TRANSPONDER	
ALTITUDE ENCODING EQUIPMENT	

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-22 HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1981
(1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
0-4 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	2945 11.5 5.4 23.3	4239 11.1 7.8 10.1	13967 5.7 25.6 17.4	360 36.3 0.7 39.3	190 * 0.3 27.7	5510 9.6 10.1 35.3	21656 3.8 39.6 36.6	54062 2.4 21.2
5-9 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	7918 6.5 14.7 17.1	2348 13.4 4.4 18.6	4963 9.9 9.2 11.8	108 * 0.2 11.8	146 * 0.3 21.3	3431 12.2 6.4 22.0	15332 4.8 26.5 25.9	53774 2.5 20.9
10-14 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	4566 9.8 11.8 9.8	1974 14.0 5.1 15.6	5907 9.0 15.2 14.1	66 * 0.2 7.2	102 * 0.3 14.9	2257 15.1 5.8 14.5	9383 6.0 24.2 15.8	38753 3.1 15.0
15-19 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	3857 10.7 10.5 8.3	1598 16.5 4.3 12.7	7532 8.2 20.4 17.9	106 * 0.3 11.6	53 * 0.1 7.7	1700 16.8 4.6 10.9	6761 7.2 18.3 11.4	36891 3.2 14.3
20-24 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	2168 14.4 9.8 4.7	1186 19.9 5.4 9.4	5086 9.5 23.0 12.1	32 * 0.1 3.5	0 0.0 0.0 0.0	1631 16.8 7.4 10.5	3358 10.6 15.2 5.7	22070 4.0 8.6
25-29 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	1880 15.0 15.1 4.0	378 29.7 3.0 3.0	4331 9.2 34.7 10.3	46 * 0.4 5.0	67 * 0.5 9.8	439 31.3 3.5 2.8	875 19.9 7.0 1.5	12468 4.9 4.8
30-34 YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	4038 8.6 29.4 6.7	1025 17.6 7.5 8.1	5266 7.0 38.4 12.5	6 * 0.0 0.7	0 0.0 0.0 0.0	261 37.7 1.9 1.7	418 27.6 3.0 0.7	13731 3.9 5.3
35+ YRS	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	16033 3.2 63.6 34.5	1709 13.9 6.8 13.5	4726 7.0 18.7 11.2	60 * 0.2 6.5	17 * 0.1 2.5	272 32.4 1.1 1.7	577 22.6 2.3 1.0	25209 2.1 9.8

TABLE 2-22 HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1981
(2 OF 2)

TOTALS	ESTIMATE ± STD ERR ROW ±	1	2	3	4	5	6	7	8	TOTALS
		46439	12632	42035	80137	917	686	15587	59206	257686
		1.9	4.8	2.6	1.8	22.7	24.6	5.3	1.7	
		18.0	4.9	16.3	31.1	0.4	0.3	6.0	23.0	

KEY

GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	VOR OR KNAV	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR KNAV	5. 4096 CODE TRANSPONDER	8. TWO-WAY COMMUNICATIONS
	ALTITUDE ENCODING EQUIPMENT	TWO SYSTEMS - AIR TAXIS
	6. TWO-WAY COMMUNICATIONS	ALTITUDE ENCODING EQUIPMENT
	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
	ALTITUDE ENCODING EQUIPMENT	VOR OR KNAV
		DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-23 HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1981 (1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS	
TYPE 1	ESTIMATE * STD ERR ROW * COLUMN *	33021 2.1 39.4 71.1	5108 8.8 6.1 40.4	25734 3.3 30.7 61.2	17793 3.9 21.2 22.2	153 * 0.2 16.7	107 * 0.1 15.6	1447 17.5 1.7 9.3	417 31.3 0.5 0.7	63780 0.0 32.5
TYPE 2	ESTIMATE * STD ERR ROW * COLUMN *	5292 8.5 4.4 11.4	1839 14.8 1.5 14.6	14736 4.7 12.3 35.1	56829 2.0 47.4 70.9	568 30.7 0.5 61.9	177 * 0.1 25.8	12666 6.0 10.6 81.3	27803 3.2 23.2 47.0	119910 0.0 46.5
TYPE 3	ESTIMATE * STD ERR ROW * COLUMN *	391 28.2 2.1 0.8	73 * 0.4 0.6	96 42.4 0.5 0.2	2788 10.9 14.9 3.5	84 * 0.4 9.2	86 * 0.5 12.5	623 23.8 3.3 4.0	14575 2.3 77.9 24.6	18715 0.0 7.3
TYPE 4	ESTIMATE * STD ERR ROW * COLUMN *	501 24.5 4.9 1.1	77 * 0.8 0.6	501 22.8 4.9 1.2	801 19.3 7.9 1.0	29 * 0.3 3.2	32 * 0.3 4.7	358 29.3 3.5 2.3	7840 2.4 77.3 13.2	10138 0.0 3.9
TYPE 5	ESTIMATE * STD ERR ROW * COLUMN *	63 23.0 18.5 0.1	8 * 2.3 0.1	25 26.1 7.3 0.1	58 41.2 17.0 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	19 * 5.6 0.1	168 16.0 49.3 0.3	341 0.0 0.1
TYPE 6	ESTIMATE * STD ERR ROW * COLUMN *	59 * 1.4 0.1	24 * 0.6 0.2	19 * 0.5 0.0	89 44.8 2.2 0.1	0 0.0 0.0 0.0	0 0.0 0.0 0.0	10 * 0.2 0.1	3896 1.6 95.1 6.6	4098 0.0 1.6
TYPE 7	ESTIMATE * STD ERR ROW * COLUMN *	4 * 0.7 0.0	0 0.0 0.0 0.0	15 * 2.5 0.0	51 38.2 8.5 0.1	0 0.0 0.0 0.0	2 * 0.3 0.3	11 * 1.8 0.1	518 4.3 86.2 0.9	601 0.0 0.2
TYPE 8	ESTIMATE * STD ERR ROW * COLUMN *	85 14.0 48.0 0.2	11 0.0 6.2 0.1	10 * 5.6 0.0	4 * 2.3 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	6 43.4 3.4 0.0	62 9.5 35.0 0.1	177 0.0 0.1

TABLE 2-23 HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1981 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
TYPE 9	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	136 38.3 4.4 0.3	7 " 0.2 0.1	5 " 0.2 0.0	39 " 1.3 0.0	0 0.0 0.0 0.0	27 " 0.9 0.2	2869 2.2 93.1 4.6	3083 0.0 1.2
TYPE 10	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	109 17.9 17.6 0.2	4 " 0.6 0.0	27 33.7 4.4 0.1	31 36.1 5.0 0.0	10 35.8 1.6 1.1	20 43.0 3.2 0.1	419 5.3 67.6 0.7	620 0.0 0.2
TYPE 11	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	2834 6.2 52.6 6.1	1803 10.2 33.4 14.3	327 26.8 6.1 0.6	346 28.6 6.4 0.4	0 0.0 0.0 0.0	15 " 0.3 0.1	1 " 0.0 0.0	5391 0.0 2.1
TYPE 12	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	290 25.2 7.2 0.6	800 17.3 19.8 6.3	488 25.1 12.1 1.2	1296 13.1 32.0 1.6	48 " 1.2 5.2	380 29.9 9.4 2.4	594 20.0 14.7 1.0	4047 0.0 1.6
TYPE 13	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	3655 5.3 54.2 7.9	2878 6.6 42.7 22.8	53 " 0.8 0.1	12 " 0.2 0.0	26 " 0.4 2.8	4 " 0.1 0.0	45 " 0.7 0.1	6738 0.0 4.6
ALL CRAFT	ESTIMATE \$ STD ERR ROW \$	46439 1.9 18.0	12632 4.8 4.9	42035 2.6 16.3	80137 1.8 31.1	917 22.7 0.4	15587 5.3 6.0	59206 1.7 23.0	257686

KEY

GROUP	GROUP	GROUP
1. NO REGULATORY AVIONICS	4. TWO-WAY COMMUNICATIONS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	VOR OR KNAV	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR KNAV	4096 CODE TRANSPONDER	ALTITUDE ENCODING EQUIPMENT
	ALTITUDE ENCODING EQUIPMENT	
		8. TWO-WAY COMMUNICATIONS
		TWO SYSTEMS - AIR TAXIS
		ALTITUDE ENCODING EQUIPMENT
		4096 CODE TRANSPONDER
		VOR OR KNAV
		DME

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
" STANDARD ERROR GREATER THAN 50 PERCENT.

SEE TABLE 1-6, PAGE 1-27, FOR COMPUTED AIRCRAFT TYPE KEY.

TABLE 2-24 HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1981 (1 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
ALASKAN	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	1396 17.7 17.6 11.1	3840 10.9 48.3 9.1	1718 16.3 21.6 2.1	0 0.0 0.0 0.0	1 * 0.0 0.1	16 * 0.2 0.1	240 36.5 3.0 0.4	7949 7.2 3.1
CENTRAL	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	3366 11.1 21.1 7.3	2731 13.8 17.0 6.5	5801 9.6 36.2 7.2	45 * 0.3 4.9	0 0.0 0.0 0.0	606 29.5 3.8 3.9	2830 12.3 17.7 4.8	16026 5.4 6.2
EASTERN	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	4637 9.0 17.3 10.0	4380 10.7 16.3 10.4	7264 8.5 27.1 9.1	16 * 0.1 1.7	30 * 0.1 4.4	2434 15.3 9.1 15.6	7187 7.6 26.8 12.1	26815 4.0 10.4
EUROPEAN	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	49 * 14.2 0.1	2 * 0.6 0.0	38 * 11.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	0 0.0 0.0 0.0	254 28.6 73.4 0.4	346 26.7 0.1
GREAT LAKE	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	9095 6.3 19.0 19.6	1643 16.2 3.4 13.0	9664 7.0 20.2 23.0	8 * 0.0 0.9	155 * 0.3 22.6	1734 17.1 3.6 11.1	9472 6.6 19.8 16.0	47951 2.9 18.6
NEW ENGLAND	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	1345 16.9 16.2 2.9	403 32.3 4.9 3.2	2865 13.7 34.5 3.6	0 0.0 0.0 0.0	2 * 0.0 0.3	762 26.2 9.2 4.9	1505 17.6 18.1 2.5	8295 7.5 3.2
NORTHWEST MT	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	4529 9.7 16.0 9.8	1786 15.0 6.3 14.1	9722 7.3 34.4 12.1	78 * 0.3 8.5	54 * 0.2 7.9	1569 18.2 5.5 10.1	6054 8.5 21.4 10.2	28301 3.9 11.0
SOUTHERN	ESTIMATE \$ STD ERR ROW \$ COLUMN \$	6124 8.1 15.9 13.2	1637 16.3 4.3 13.0	12925 6.3 33.6 16.1	389 38.8 1.0 42.4	70 * 0.2 10.2	2644 14.1 6.9 17.0	10033 6.2 26.1 16.9	38479 3.3 14.9

TABLE 2-24 HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1981 (2 OF 2)

	1	2	3	4	5	6	7	8	TOTALS
SOUTHWEST									
ESTIMATE	7169	1692	4043	11167	310	173	1939	11695	38167
% STD ERR	7.1	15.5	11.0	6.7	39.4	*	16.9	5.7	3.3
ROW %	18.8	4.4	10.6	29.2	0.8	0.5	5.1	30.6	
COLUMN %	15.4	13.4	9.6	13.9	33.8	25.2	12.4	19.8	14.8
WSF-PACIFI									
ESTIMATE	6642	2603	6418	14023	102	204	4534	10741	45267
% STD ERR	7.3	11.8	8.5	5.9	*	44.5	10.7	6.1	2.9
ROW %	14.7	5.8	14.2	31.0	0.2	0.5	10.0	23.7	
COLUMN %	14.3	20.6	15.3	17.5	11.1	29.7	29.1	19.1	17.6
TOTALS									
ESTIMATE	46439	12632	42035	80137	917	686	15587	59206	257686
% STD ERR	1.9	4.8	2.6	1.8	22.7	24.6	5.3	1.7	
ROW %	18.0	4.9	16.3	31.1	9.4	0.3	6.0	23.0	

KEY

GROUP	GROUP
1. NO REGULATORY AVIONICS	7. TWO-WAY COMMUNICATIONS
2. TWO-WAY COMMUNICATIONS	TWO SYSTEMS - AIR TAXIS
3. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	ALTITUDE ENCODING EQUIPMENT
VOR OR ADF OR RNAV	
4. TWO-WAY COMMUNICATIONS	8. TWO-WAY COMMUNICATIONS
4096 CODE TRANSPONDER	TWO SYSTEMS - AIR TAXIS
ALTITUDE ENCODING EQUIPMENT	ALTITUDE ENCODING EQUIPMENT
5. TWO-WAY COMMUNICATIONS	4096 CODE TRANSPONDER
TWO SYSTEMS - AIR TAXIS	VOR OR RNAV
VOR OR ADF OR RNAV	DME
6. TWO-WAY COMMUNICATIONS	
4096 CODE TRANSPONDER	
ALTITUDE ENCODING EQUIPMENT	

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-25 NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1981
(1 OF 2)

	ESTIMATE & STD ERR ROW & COLUMN &	L	L,MB	L,MB/ GS	L,MB/ GS,RA	LRN	RA	ML	L,MB/ GS,ML	LKM,ML	MD GROUP	ALL CRAFT
EXECUTIVE	ESTIMATE	639	372	7142	7637	1917	7736	259	256	55	2988	19093
	& STD ERR	25.5	34.6	7.4	4.5	8.3	4.4	29.1	29.3	"	12.4	3.8
	ROW &	3.3	1.9	37.4	40.0	10.0	40.5	1.4	1.3	0.3	15.6	
BUSINESS	ESTIMATE	1359	2630	29720	5320	874	5461	322	226	99	9505	48732
	& STD ERR	18.3	13.5	3.4	7.6	19.2	7.5	37.9	44.4	"	9.8	2.5
	ROW &	2.8	5.4	61.0	10.9	1.8	11.2	0.7	0.5	0.2	19.5	
PERSONAL	ESTIMATE	7211	7025	30562	882	391	1218	262	170	104	52184	98215
	& STD ERR	6.0	8.2	3.5	21.9	35.8	18.8	42.2	"	"	2.1	1.4
	ROW &	7.3	7.2	31.1	0.9	0.4	1.2	0.3	0.2	0.1	53.1	
INSTRUCT.	ESTIMATE	45.1	57.5	34.1	5.3	9.7	7.0	26.7	21.7	31.6	42.7	38.1
	& STD ERR	2992	263	4772	181	37	181	5	5	0	7304	15234
	ROW &	12.3	45.8	10.3	1.2	0.2	1.2	0.0	0.0	0.0	7.8	5.2
AERIAL AP.	ESTIMATE	104	0	435	42	9	43	9	9	9	7627	8208
	& STD ERR	43.6	0.0	30.1	"	"	"	"	"	"	3.8	3.9
	ROW &	1.3	6.0	5.3	0.5	0.1	0.5	0.1	0.1	0.1	92.9	
AERIAL OBS	ESTIMATE	398	227	727	156	124	236	0	0	0	2015	3555
	& STD ERR	33.7	"	25.3	46.4	"	41.1	0.0	0.0	0.0	14.3	11.0
	ROW &	11.2	6.4	20.5	4.4	3.5	6.6	0.0	0.3	0.0	56.7	
OTHER WORK	ESTIMATE	2.5	1.9	0.8	0.9	3.1	1.4	0.0	0.0	0.0	1.6	1.4
	& STD ERR	161	1	12	18	12	22	0	0	0	1447	1584
	ROW &	6.4	0.1	0.8	1.1	0.8	1.4	0.0	0.0	0.0	16.2	15.4
COMPUTER	ESTIMATE	24	0	842	180	5	180	0	0	0	36	1085
	& STD ERR	"	0.0	17.2	29.6	"	29.6	0.0	0.0	0.0	"	14.2
	ROW &	2.2	0.0	77.6	16.6	0.5	16.6	0.0	0.0	0.0	3.5	
	COLUMN &	0.1	0.0	0.9	1.1	0.1	1.9	0.0	0.0	0.0	0.0	0.4

TABLE 2-25 NON-HIERARCHICAL GROUPS - PRIMARY USE VS. CAPABILITY GROUP - CY 1981
(2 OF 2)

	L	L, MB	L, MB, GS	L, MB, GS, KA	L, MB, GS, ML	RA	ML	L, MB, GS, ML	L, MB, ML	NO GROUP	ALL CRAFT
AIR TAXI	ESTIMATE	311	22	4757	1034	228	2	2	0	125J	7504
	% STD ERR	36.2	"	9.0	16.9	38.7	"	"	0.0	17.6	0.9
	ROW & COLUMN &	4.1 1.9	0.3 0.2	63.4 5.3	13.8 6.3	3.0 5.7	0.0 0.2	0.0 0.3	0.0 0.0	16.7 1.0	2.9
OTHER	ESTIMATE	424	150	1624	528	151	64	56	0	2210	4949
	% STD ERR	27.0	49.0	15.6	18.9	25.8	"	"	"	12.0	6.1
	ROW & COLUMN &	8.0 2.6	3.0 1.2	32.8 1.8	10.7 3.2	3.1 3.8	1.3 0.5	1.1 7.2	0.2 2.4	44.8 1.8	1.9
RENTAL	ESTIMATE	956	169	6004	238	61	0	0	0	3362	10745
	% STD ERR	23.4	"	9.1	43.0	49.2	0.0	0.0	0.0	11.8	0.0
	ROW & COLUMN &	8.9 6.0	1.6 1.4	55.9 6.7	2.2 1.4	0.6 1.5	0.0 0.0	0.0 0.0	0.0 0.0	31.3 2.8	4.2
INACTIVE	ESTIMATE	1488	1378	3064	369	231	70	68	58	32764	39107
	% STD ERR	16.4	18.2	11.8	23.6	33.1	"	"	"	2.9	2.7
	ROW & COLUMN &	3.8 9.3	3.5 11.3	7.8 3.4	0.9 2.2	0.6 5.8	0.2 7.1	0.2 8.7	0.1 17.6	83.8 20.8	15.2
TOTALS	ESTIMATE	16005	12213	89675	16510	4014	980	782	329	122125	257686
	% STD ERR	5.1	6.1	1.4	3.2	7.4	19.5	21.0	32.6	1.3	1.3
	ROW &	6.2	4.7	34.8	6.4	1.6	0.4	0.3	0.1	47.4	

KEY

GROUP	GROUP
L: LOCALIZER	RA: RADAR ALTIMETER
MB: MARKER BEACON	L, MB: LONG RANGE RNAV
GS: GLIDE SLOPE	ML: MICROWAVE LANDING SYSTEM

NOTE : ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
" STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-26 NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1981
(1 OF 2)

	ESTIMATE & STD ERR ROW & COLUMN &	L	L,MB GS	L,MB/ GS,RA	LRN	KA	ML	L,MB/ GS,ML	LKN,ML	NU GROUP	ALL CRAFT
1-49		3413 11.3 6.9 21.3	2673 13.4 5.4 21.9	522 24.0 1.1 3.2	200 48.7 0.4 5.0	665 21.6 1.3 3.8	163 "	66 "	0 0.0 0.0 0.0	32357 3.2 65.2 26.5	49617 2.0 19.3
50-99		3349 11.9 7.2 20.9	3224 12.4 6.9 26.4	1394 17.2 3.0 8.4	303 36.9 0.7 7.5	1615 16.1 3.5 9.3	60 "	1 "	55 "	21324 4.3 45.9 17.5	46504 2.8 18.9
100-149		2039 15.5 6.2 12.7	2309 14.7 7.1 18.9	1537 14.9 4.7 9.3	241 37.2 0.7 0.0	1670 14.5 5.1 9.6	375 34.2 1.1 38.3	335 36.0 1.1 42.6	139 "	10036 8.2	32722 3.5 12.7
150-199		416 30.9 2.3 2.6	1129 20.4 6.3 9.2	1335 15.2 7.4 8.1	320 33.7 1.8 8.0	1373 14.9 7.6 7.9	41 "	41 "	6 "	4957 9.8 27.6 4.1	17988 4.9 7.9
200-249		1104 20.7 6.1 6.9	468 33.2 2.6 3.8	2335 12.1 13.0 14.1	347 26.6 1.9 8.6	2339 12.1 13.0 13.4	34 "	34 "	0 0.0 0.0 0.0	5175 9.2 28.8 4.2	17987 4.8 7.0
250-299		799 24.8 8.8 5.0	410 35.8 4.5 3.4	1082 17.0 11.9 6.6	85 34.9 3.9 2.1	1127 16.9 12.4 6.5	74 "	74 "	0 0.0 0.0 0.0	2009 15.9 22.1 1.6	9091 6.9 3.5
300-349		529 30.5 6.0 3.3	175 "	1428 13.9 16.2 8.6	374 27.6 4.2 9.3	1470 13.8 16.6 8.4	16 "	16 "	1 "	2605 12.8 29.5 2.1	8842 6.9 3.4
350-399		481 31.3 7.2 3.0	65 "	1461 13.7 21.8 8.8	174 28.3 2.6 4.3	1461 13.7 21.8 8.4	13 "	10 "	3 "	1723 16.5 25.7 1.4	6710 6.0 2.6 2.6

TABLE 2-26 NON-HIERARCHICAL GROUPS - HOURS FLOWN VS. CAPABILITY GROUP - CY 1981
(2 OF 2)

	L	L, MB	L, MB, GS	L, MB, GS, RA	LRN	KA	ML	L, MB, GS, ML	L, MB, ML	NU GROUP	ALL CRAFT
400-449	ESTIMATE	623	147	2540	902	287	908	0	0	1363	5575
	% STD ERR	29.0	*	13.0	15.0	27.5	14.9	0.0	0.0	18.5	8.8
	KOM %	11.2	4.6	45.0	16.2	5.1	16.3	0.0	0.0	24.4	
	COLUMN %	3.9	1.2	2.8	5.5	7.1	5.2	0.0	0.0	1.1	2.2
450 UP	ESTIMATE	1749	254	9014	4212	1470	4424	144	68	7806	23495
	% STD ERR	16.5	43.7	6.9	6.5	11.3	6.5	34.8	48.5	7.3	3.9
	KOM %	7.4	1.1	38.4	17.9	6.3	18.8	0.0	0.3	33.2	
	COLUMN %	10.9	2.1	10.1	25.5	36.6	25.4	14.7	20.7	6.4	9.1
INACTIVE	ESTIMATE	1488	1378	3064	369	231	438	70	58	32764	39107
	% STD ERR	16.4	16.2	11.8	23.6	33.1	23.5	*	*	2.9	2.7
	KOM %	3.8	3.5	7.8	0.9	0.6	1.1	0.2	0.1	83.8	
	COLUMN %	9.3	11.3	3.4	2.2	5.8	2.5	7.1	17.6	26.8	15.2
TOTALS	ESTIMATE	16005	12213	89675	16510	4014	17416	980	329	122125	257080
	% STD ERR	5.1	6.1	1.4	3.2	7.4	3.2	19.5	32.6	1.0	
	KOM %	6.2	4.7	34.8	6.4	1.0	6.8	0.4	0.1	47.4	

KEY

GROUP		GROUP	
L:	LOCALIZER	KA:	KADAK ALTIMETER
MB:	MARKER BEACON	LRN:	LONG RANGE RNAV
GS:	GLIDE SLOPE	ML:	MICROWAVE LANDING SYSTEM

NOTE: KOMS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
* STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-27 NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1981
(1 OF 2)

1981

		L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	KA	ML	L,MB, GS,ML	LKM,ML	NU GROUP	ALL CRAFT
0-4 YRS	ESTIMATE	4341	1045	24746	6822	1579	6971	354	354	89	17488	54602
	& STD ERR	10.3	22.7	4.0	5.8	12.9	5.8	33.4	33.4	"	4.7	2.4
	NUM &	7.9	1.9	45.3	12.6	2.9	12.8	0.6	0.6	0.2	32.3	
	COLUMN &	27.1	8.6	27.6	41.7	39.3	40.0	36.1	45.3	27.1	14.3	21.2
5-9 YRS	ESTIMATE	2469	1209	23425	5108	1145	5294	302	203	181	21122	53774
	& STD ERR	14.3	20.6	4.2	7.6	16.6	7.5	37.4	42.3	48.4	4.2	2.5
	NUM &	4.0	2.2	43.6	9.6	2.1	9.8	0.6	0.4	0.3	39.3	
	COLUMN &	15.4	9.9	26.1	31.3	28.5	30.4	30.8	26.0	55.0	17.3	20.9
10-14 YRS	ESTIMATE	2355	3390	14152	2496	523	2793	135	80	11	16282	38753
	& STD ERR	14.5	12.2	5.4	10.1	23.1	10.2	"	"	"	5.1	3.1
	NUM &	6.1	8.7	36.5	6.4	1.3	7.2	0.3	0.2	0.0	42.0	
	COLUMN &	14.7	27.8	15.8	15.1	13.0	16.0	13.8	10.2	3.3	13.3	15.0
15-19 YRS	ESTIMATE	1954	3174	14007	997	508	1090	109	100	2	16574	36891
	& STD ERR	16.4	12.9	5.4	17.0	26.5	16.8	"	"	"	5.2	3.2
	NUM &	5.3	8.6	38.0	2.7	1.4	3.0	0.3	0.3	0.0	44.9	
	COLUMN &	12.2	26.0	15.6	6.0	12.7	6.3	10.2	12.8	0.6	13.6	14.3
20-24 YRS	ESTIMATE	1493	1496	7383	454	164	517	39	7	0	11205	22070
	& STD ERR	18.2	18.1	7.3	25.0	33.2	23.8	"	"	0.0	6.1	4.0
	NUM &	6.8	6.8	33.5	2.1	0.7	2.3	0.2	0.0	0.0	50.8	
	COLUMN &	9.3	12.2	8.2	2.7	4.1	3.0	4.0	0.9	0.0	9.2	8.6
25-29 YRS	ESTIMATE	1143	1189	2925	173	90	175	6	6	6	6993	12468
	& STD ERR	19.7	19.7	11.4	33.6	"	33.3	"	"	"	7.2	4.9
	NUM &	9.2	9.5	23.5	1.4	0.7	1.4	0.0	0.0	0.0	56.1	
	COLUMN &	7.1	9.7	3.3	1.0	2.2	1.0	0.6	0.8	1.8	5.7	4.8
30-34 YRS	ESTIMATE	993	466	1516	50	3	117	8	8	3	10619	13731
	& STD ERR	18.1	27.9	14.8	45.9	"	48.2	"	"	"	4.7	3.9
	NUM &	7.2	3.5	11.0	0.4	0.0	0.9	0.1	0.1	0.0	77.3	
	COLUMN &	6.2	4.0	1.7	0.3	0.1	0.7	0.8	1.0	0.9	6.7	5.3
35+ YRS	ESTIMATE	726	492	1260	102	106	276	55	32	32	22445	25209
	& STD ERR	18.1	25.5	14.4	48.3	"	34.5	"	"	"	2.4	2.1
	NUM &	2.9	2.0	5.0	0.4	0.4	1.1	0.2	0.1	0.1	89.3	
	COLUMN &	4.5	4.0	1.4	0.6	2.6	1.6	5.6	4.1	9.7	16.4	9.8

TABLE 2-27 NON-HIERARCHICAL GROUPS - AGE OF AIRCRAFT VS. CAPABILITY GROUP - CY 1981
(2 OF 2)

TOTALS	ESTIMATE % STD ERR KOW %	L	L,MB	L,MB, GS	L,MB, GS,RA	LRN	RA	ML	L,MB, GS,ML	LKN,ML	NU GROUP	ALL CRAFT
		16005	12213	89675	16510	4014	17416	980	782	329	122125	257080
		5.1	6.1	1.4	3.2	7.4	3.2	19.5	21.9	32.6	1.3	
		6.2	4.7	34.8	6.4	1.6	6.8	0.4	0.3	0.1	47.4	

KEY

GROUP

L: LOCALIZER

MB: MARKER BEACON

GS: GLIDE SLOPE

GROUP

RA: RADAR ALTIMETER

LKN: LONG RANGE NAV

ML: MICROWAVE LANDING SYSTEM

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
% = STANDARD ERROR GREATER THAN 50 PERCENT.

TABLE 2-28 NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1981 (1 OF 2)

TYPE	ESTIMATE STD ERR ROW % COLUMN %	L	L, MB GS	L, MB/ GS, MA	LRN	RA	ML	L, MB/ GS, ML	LRN, ML	NU GROUP	ALL CRAFT
TYPE 1	ESTIMATE	7143	1796	68	127	289	123	108	42	71328	83780
	STD ERR	7.6	16.2	11.8	"	37.8	"	"	"	0.9	0.9
	ROW %	8.5	2.1	0.1	0.2	0.3	0.1	0.1	0.1	85.1	32.5
	COLUMN %	44.6	14.7	0.4	3.2	1.7	12.6	13.8	12.8	58.4	
TYPE 2	ESTIMATE	7530	9598	65432	651	2618	283	104	57	34595	119910
	STD ERR	7.6	6.9	1.7	28.2	13.3	42.7	"	"	2.9	0.0
	ROW %	6.3	8.0	54.6	0.5	2.2	0.2	0.1	0.0	28.9	0.0
	COLUMN %	47.0	78.6	14.1	16.2	15.0	28.9	13.3	17.3	28.3	46.5
TYPE 3	ESTIMATE	161	534	13453	226	3689	331	331	75	928	18715
	STD ERR	41.3	27.4	4.7	43.3	8.4	32.2	32.2	"	18.9	0.3
	ROW %	1.0	2.9	71.9	1.2	19.7	1.8	1.8	0.4	5.0	7.3
	COLUMN %	1.1	4.4	15.0	5.6	21.2	33.8	42.3	22.8	0.6	
TYPE 4	ESTIMATE	179	191	6019	145	3019	46	46	6	731	10138
	STD ERR	40.4	40.3	4.3	45.5	7.1	"	"	"	19.8	0.3
	ROW %	1.8	1.9	29.4	1.4	29.8	0.5	0.5	0.1	7.2	3.9
	COLUMN %	1.1	1.6	6.7	3.6	17.3	4.7	5.9	1.8	0.6	
TYPE 5	ESTIMATE	4	6	199	13	30	0	0	0	96	341
	STD ERR	"	"	16.9	"	"	0.0	0.0	0.0	15.8	0.0
	ROW %	1.2	1.8	58.4	3.8	10.6	0.0	0.0	0.0	28.2	0.1
	COLUMN %	0.0	0.0	0.2	3.3	0.2	0.0	0.0	0.0	0.1	
TYPE 6	ESTIMATE	20	0	390	281	3643	3	3	2	59	4098
	STD ERR	"	0.0	21.4	23.9	2.4	"	"	"	"	0.0
	ROW %	0.5	0.0	9.5	6.9	88.9	0.1	0.1	0.0	1.4	0.0
	COLUMN %	0.1	0.0	0.4	7.0	20.9	0.3	0.4	0.6	0.0	1.6
TYPE 7	ESTIMATE	11	0	227	61	355	10	10	0	8	601
	STD ERR	"	0.0	13.5	37.1	8.9	"	"	0.0	"	0.0
	ROW %	1.8	0.0	37.8	10.1	59.1	1.7	1.7	0.0	1.3	0.0
	COLUMN %	0.1	0.0	0.3	1.5	2.0	1.0	1.3	0.0	0.0	0.2
TYPE 8	ESTIMATE	13	2	32	26	45	0	0	0	96	177
	STD ERR	14.0	"	14.8	20.7	12.9	0.0	0.0	0.0	5.9	0.0
	ROW %	7.3	1.1	16.1	14.7	25.4	0.0	0.0	0.0	54.2	0.0
	COLUMN %	0.1	0.0	0.0	0.6	0.3	0.0	0.0	0.0	0.1	

TABLE 2-28 NON-HIERARCHICAL GROUPS - COMPUTED AIRCRAFT TYPE VS. CAPABILITY GROUP
CY 1981 (2 OF 2)

TYPE 9	ESTIMATE # STD ERR ROW # COLUMN #	L	L, MB GS	L, MB/ GS, RA	LRN	KA	ML	L, MB/ GS, ML	LRN/ML	NU GROUP	ALL CRAFT
		0	5	2736	1575	2740	104	101	90	143	3083
		0.0	23.7	2.5	0.4	2.5	41.9	42.8	43.4	37.5	0.0
		0.0	0.2	88.7	51.1	88.9	3.4	3.1	3.1	4.6	1.2
		0.0	0.0	16.6	39.2	15.7	10.0	12.9	29.2	0.1	
TYPE 10	ESTIMATE # STD ERR ROW # COLUMN #	19	2	402	330	410	22	22	0	125	620
		34.3	18.7	5.3	6.4	5.1	0.0	0.0	0.0	15.8	0.0
		3.1	10.6	64.8	53.2	60.1	3.5	3.5	0.0	20.2	
		0.1	0.1	2.4	8.2	2.4	2.2	2.8	0.0	0.1	0.2
TYPE 11	ESTIMATE # STD ERR ROW # COLUMN #	50	3	0	0	0	0	0	0	5337	5391
		0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0
		0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.3	
		0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	2.1
TYPE 12	ESTIMATE # STD ERR ROW # COLUMN #	746	77	265	534	526	12	12	7	2097	4047
		19.8	28.5	16.5	24.8	19.9	0.0	0.0	0.0	8.2	0.0
		18.4	10.7	6.5	13.2	13.0	0.3	0.3	0.2	51.8	
		4.7	0.5	1.6	13.3	3.0	1.2	1.5	2.1	1.7	1.6
TYPE 13	ESTIMATE # STD ERR ROW # COLUMN #	110	0	45	45	45	45	45	45	6584	6738
		0.0	0.0	0.7	0.7	0.7	0.7	0.7	0.7	1.1	0.0
		1.6	0.0	0.3	1.1	0.3	4.6	5.8	13.7	97.7	
		0.7	0.0	0.3	1.6	0.3	0.4	0.3	0.3	5.4	2.6
ALL CRAFT	ESTIMATE # STD ERR ROW #	16005	12213	16510	4014	17416	980	782	329	122125	257686
		5.1	6.1	3.2	7.4	3.2	19.5	21.0	32.6	1.0	
		6.2	4.7	6.4	1.6	6.8	0.4	0.3	0.1	47.4	

KEY

GROUP	GROUP
L: LOCALIZER	RA: KADAR ALTIMETER
MB: MARKER BEACON	LRN: LONG RANGE RNAV
GS: GLIDE SLOPE	ML: MICROWAVE LANDING SYSTEM

NOTE: ROWS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
" " STANDARD ERROR GREATER THAN 50 PERCENT.

SEE TABLE 1-6, PAGE 1-27, FOR COMPUTED AIRCRAFT TYPE KEY.

TABLE 2-29 NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1981 (1 OF 2)

		L	L,MB	L,MB/ GS	L,MB/ GS,NA	LRN	RA	ML	L,MB/ GS,ML	LRN,ML	NU GROUP	ALL CRAFT
ALASKAN	ESTIMATE	715	281	1201	219	15	230	0	0	0	5533	7949
	* STD ERR	26.9	42.7	19.3	33.3	"	31.7	0.0	0.0	0.0	8.9	7.2
	KUM &	9.0	3.5	15.1	2.8	0.2	2.9	0.0	0.0	0.0	69.6	3.1
	COLUMN &	4.5	2.3	1.3	1.3	3.4	1.3	0.0	0.0	0.0	4.5	
CENTRAL	ESTIMATE	756	768	5837	634	188	808	0	0	0	7854	16026
	* STD ERR	25.6	27.1	9.3	20.9	44.8	19.7	0.0	0.0	0.0	7.5	5.4
	KUM &	4.7	4.8	36.4	4.0	1.2	5.0	0.0	0.0	0.0	49.3	0.2
	COLUMN &	4.7	6.3	6.5	3.8	4.7	4.6	0.0	0.0	0.0	6.4	
EASTERN	ESTIMATE	1872	1544	10413	1942	655	2044	243	186	100	10987	26815
	* STD ERR	16.8	19.3	6.8	12.1	19.3	12.1	43.9	47.9	"	6.3	4.0
	KUM &	7.0	5.8	38.8	7.2	2.4	7.0	0.7	0.7	0.4	41.3	10.4
	COLUMN &	11.7	12.0	11.6	11.8	16.3	11.7	24.8	23.8	38.4	9.0	
EUROPEAN	ESTIMATE	3	38	67	186	150	186	30	30	0	51	346
	* STD ERR	"	"	"	31.2	36.7	31.2	"	"	0.0	14.7	26.7
	KUM &	0.9	11.0	19.4	53.8	43.4	53.8	8.7	8.7	0.0	0.0	0.1
	COLUMN &	0.0	3.3	0.1	1.1	3.7	1.1	3.1	3.8	0.0	0.0	
GREAT LAKE	ESTIMATE	3410	3381	14699	2659	599	2742	188	116	58	23702	47951
	* STD ERR	12.4	12.6	5.7	10.1	19.1	10.0	45.2	"	"	4.2	2.9
	KUM &	7.1	7.1	30.7	5.5	1.2	5.7	0.4	0.2	0.1	49.4	18.6
	COLUMN &	21.3	27.7	16.4	16.1	14.9	15.7	19.2	14.8	17.6	19.4	
NEW ENGLAND	ESTIMATE	468	272	3044	500	49	529	12	12	5	3984	8295
	* STD ERR	30.2	43.3	13.1	27.3	"	26.3	"	"	"	19.8	7.5
	KUM &	5.6	3.3	36.7	6.0	0.6	6.4	0.1	0.1	0.1	48.0	3.2
	COLUMN &	2.9	2.2	3.4	3.0	1.2	3.0	1.2	1.5	1.5	3.3	
NORTHWEST MT	ESTIMATE	2046	1321	9905	1255	310	1393	157	76	2	13596	28321
	* STD ERR	15.7	19.7	7.0	15.9	36.9	15.6	48.3	"	"	5.7	3.9
	KUM &	7.2	4.7	35.0	4.4	1.1	4.9	0.6	0.3	0.0	48.0	11.0
	COLUMN &	12.8	10.8	11.0	7.6	7.7	8.0	16.0	9.7	0.6	11.1	
SOUTHERN	ESTIMATE	2619	1842	14489	3165	480	3375	172	170	93	16360	38479
	* STD ERR	14.2	17.4	5.6	10.0	22.4	9.8	"	"	"	5.2	3.3
	KUM &	6.8	4.8	37.7	8.2	1.2	8.8	0.4	0.4	0.2	42.5	14.9
	COLUMN &	16.4	15.1	16.2	19.2	12.0	19.4	17.6	21.7	28.3	13.4	

TABLE 2-29 NON-HIERARCHICAL GROUPS - BASE AIRPORT REGION VS. CAPABILITY GROUP
CY 1981 (2 OF 2)

	L	L,MB	L,MB, US	L,MB, US,RA	LRN	RA	ML	L,MB, GS,ML	LKN,ML	NU GROUP	ALL CRAFT
SOUTHWEST	ESTIMATE	1881	1156	14592	3529	1054	3585	68	25	16539	34187
	% STD ERR	16.4	21.3	5.6	8.8	17.3	8.7	"	"	5.1	3.3
	KOM & COLUMN &	4.9 11.8	3.0 9.5	38.2 16.3	9.2 21.4	2.8 26.3	9.4 20.6	0.2 6.9	0.1 7.6	43.3 13.5	14.8
WEST-PACIFIC	ESTIMATE	2841	1927	17144	2637	357	2651	140	54	20707	45267
	% STD ERR	13.0	16.0	5.1	11.3	21.2	11.2	"	"	4.4	2.9
	KOM & COLUMN &	6.3 17.8	4.3 15.8	37.9 19.1	5.8 16.0	0.8 8.9	5.9 15.2	0.3 14.3	0.1 15.8	45.7 17.0	17.0
TOTALS	ESTIMATE	16005	12213	89675	16510	4014	17416	980	329	122125	257686
	% STD ERR	5.1	6.1	1.4	3.2	7.4	3.2	19.5	32.6	1.0	1.0
	KOM &	6.2	4.7	34.8	6.4	1.6	6.8	0.4	6.1	47.4	17.0

KEY

GROUP LOCALIZER
L: LOCALIZER
MB: MARKER BEACON
GS: GLIDE SLOPE
RA: RADAR ALTIMETER
LRN: LONG RANGE RNAV
ML: MICROWAVE LANDING SYSTEM

NOTE: KOMS AND COLUMNS MAY NOT SUM TO PRINTED TOTALS DUE TO ESTIMATION PROCEDURES.
" STANDARD ERROR GREATER THAN 50 PERCENT.

APPENDIX A.1 FIRST MAILING COVER LETTER



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591

March 1982

Dear Aircraft Owner:

Enclosed is the annual General Aviation Activity and Avionics Survey for calendar year 1981. Data collected in the survey will be used for performing safety analysis, for determining the demand for air traffic facilities and services, and for assessing the impact of proposed regulatory changes on the general aviation fleet.

The survey is being mailed to owners of a random sample of less than 15 percent of all general aviation aircraft. Because the sample is random, it is possible that more than one of your aircraft may be selected or that your aircraft may be selected in successive years. This may happen in particular when there are a small number of aircraft of the type that you own. When more than one of your aircraft are selected, you will find a separate questionnaire provided for each aircraft. Please answer all questions for the aircraft identified. If you cannot determine precisely an answer to a question, please make your best estimate.

If your aircraft was not in use during the year (e.g., in storage, dismantled, destroyed, exported, etc.) please check item 5, indicating the aircraft was not flown. If the aircraft was sold prior to January 1981, it would be quite helpful if you would write a note indicating this on the survey questionnaire. If your aircraft is operated principally by another (leased, etc.), please obtain the necessary information from the operator or forward these materials to that person or firm for completion.

Please return this questionnaire in the enclosed self-addressed postpaid envelope within 10 days. Because the survey is based on a sample of general aviation aircraft, your response is especially important to the accuracy of the results. A prompt response will eliminate the need for additional follow-up contacts. A high response rate will ensure the continued use of sampling methods to collect activity and avionics data.

The data gathered from this survey will be used only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records. We appreciate your cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read "F. C. Osgood", is written over a horizontal line.

F. C. Osgood
Chief, Information and
Statistics Division, AMS-200

Enclosure

APPENDIX A.2 SECOND MAILING COVER LETTER



DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, D.C. 20591

April 1982

Dear Aircraft Owner:

In March the Federal Aviation Administration sent aircraft owners a questionnaire as part of its program to gather statistical information on the use and characteristics of the general aviation fleet.

You were one of the aircraft owners selected at random to receive a questionnaire. As of this date, we have not received a response from you. In the event the survey questionnaire has been lost or misplaced, another copy is enclosed for your convenience in responding. A prompt response will eliminate the need for additional follow-up contacts. If you have already responded, please disregard this notice. We appreciate your cooperation.

Sincerely,

A handwritten signature in dark ink, appearing to read "F. C. Osgood", is positioned above the typed name and title.

F. C. Osgood
Chief, Information and Statistics
Division, AMS-200

Enclosure

APPENDIX A.3 SURVEY QUESTIONNAIRE

1 CONTROL NUMBER	DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION GENERAL AVIATION ACTIVITY and AVIONICS SURVEY (As of December 31, 1981)	Form Approved OMB No. 2120-0080
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This report is authorized by Section 311 of the Federal Aviation Act of 1958, as amended. While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate and timely. Information collected in this survey will be used for statistical purposes only and not to disclose individual aircraft activity.

2 ☐ "X" here if you operate your aircraft principally as an air carrier (under FAR 121 or 127). If so, DO NOT complete remainder of form. However please return to address shown below. ▼

3 AIRCRAFT CHARACTERISTICS

INSTRUCTIONS: Please answer questions for the aircraft identified at right. Mail the completed questionnaire in the enclosed postage paid envelope to

Transportation Systems Center—GAF
Kendall Square
Cambridge, Massachusetts 02142

<p>4. What were the total lifetime airframe hours as of December 31, 1981</p> <p>5. Was aircraft flown in Calendar Year 1981? (Check one) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Skip to question 10)</p> <p>6. Did you own this aircraft for the entire year of 1981? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No If "No," include previous owner's hours for 1981 in your estimates below.</p> <p>7. HOURS FLOWN DURING CALENDAR YEAR 1981</p> <p>EXECUTIVE CORPORATE TRANSPORTATION — Company flying with a professional crew transporting company personnel, guests, and cargo</p> <p>BUSINESS TRANSPORTATION — Individual use of an aircraft for business transportation</p> <p>PERSONAL — Individual flying for personal reasons</p> <p>INSTRUCTIONAL — Flying with or under the supervision of a flight instructor (excludes proficiency flying)</p> <p>AERIAL APPLICATION — Agriculture, health, forestry, cloud seeding, firefighting, insect control, etc.</p> <p>AERIAL OBSERVATION — Aerial mapping/photography, survey, patrol, fish spotting, search and rescue, hunting, highway traffic advisory, sightseeing (not Part 135), etc.</p> <p>OTHER WORK USE — Construction work (not Part 135), helicopter hoist, aerial advertising, towing gliders, parachuting, etc.</p> <p>COMBIAUTER AIR CARRIER — Performs at least five scheduled round trips per week between two or more points or carries mail</p> <p>DEMAND AIR TAXI — All Part 135 passenger and cargo operations, including charter and excluding commuter air carrier</p> <p>OTHER — Experimentation, R&D, testing, demonstrations, government, air shows, air racing, etc.</p> <p>AIRCRAFT RENTAL BUSINESS — Commercial flying club, leased and rental aircraft activity. (If you know the purpose of flight, assign hours to categories above. If not, enter hours here)</p>	HOURS	<p>8. Was this aircraft flown on an Instrument Flight Plan in 1981? 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No If "Yes," how many hours were flown on an Instrument Flight Plan?</p> <p>9. Estimate of this aircraft's average rate of fuel consumption (gal./hr.) during 1981 (Report whole gals. only)</p> <p>10. State (Abbreviation) or foreign country in which aircraft was based as of December 31, 1981</p> <p>11. AVIONICS EQUIPMENT CAPABILITY (X ALL boxes that reflect this aircraft's current capability. If none, check the last box in each group)</p> <p>VHF COMMUNICATIONS EQUIPMENT</p> <p>VHF Communications Systems:</p> <p>360 Channels or less</p> <p>720 Channels or more</p> <p>More than one comm. system</p> <p>No VHF Communications Equipment</p> <p>TRANSPONDER EQUIPMENT</p> <p>4096 Code</p> <p>Altitude Encoding Equipment</p> <p>No Transponder Equipment</p> <p>NAVIGATION EQUIPMENT</p> <p>VOR Receiver:</p> <p>100 Channels</p> <p>200 Channels</p> <p>More than one VOR Receiver</p> <p>Automatic Direction Finder (ADF)</p> <p>Distance Measuring Equipment (DME)</p> <p>Area Navigation Equipment (RNAV)</p> <p>Long Range Nav (Doppler, INS, Other)</p> <p>Flight Director</p> <p>Radar Altimeter</p> <p>Flight Management Computer</p> <p>No Navigation Equipment</p> <p>ILS RECEIVING EQUIPMENT</p> <p>Localizer</p> <p>Marker Beacon</p> <p>Glide Slope</p> <p>Microwave Landing System</p> <p>No ILS Receiving Equipment</p>	IFR HOURS GAL. HR. STATE
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THANK YOU
FOR YOUR COOPERATION

APPENDIX B

SAMPLE DESIGN

B.1 SAMPLE FRAME AND SIZE

The Aircraft Registration Master File, maintained by the FAA Mike Monroney Aeronautical Center in Oklahoma City, provided the sample frame, the list of aircraft from which the sample was selected, for the survey. This file is the official record of registered civil aircraft in the U.S., containing one record per aircraft.

Between the 1977 and 1978 survey cycles several changes occurred to this file which had an impact on the sample population and frame, and ultimately on the survey results. In January 1978, FAA implemented a new procedure for maintaining the file, known as triennial revalidation. Instead of requiring all owners to revalidate and update their aircraft registration annually, FAA required revalidation for only those owners who had not contacted the registry for three years. The less frequent updating affected the accuracy of the file and its representativeness. Two major consequences for the survey results are discussed below:

- 1) The accuracy of owners' addresses deteriorated causing the percentage of questionnaires returned by the post office to more than quadruple from 1977 to 1981. This partially accounted for the lower survey response rates experienced since 1977.
- 2) The file contained a residue of aircraft which under the old revalidation system would have been deregistered and purged from the file, but remained under the new system. Consequently, the population counts were inflated resulting in artificially large increases in the estimates of the number of active general aviation aircraft from 1977 to 1978, and from 1978 to 1979.

Also during this period the entire Aircraft Registration System was installed on a new computer system. At the same time, FAA modified many of the updating and processing procedures. It is quite possible that these changes affected the registration file, although it is not known in what way.

Finally, new legislation required two categories of aircraft, formerly ineligible, to be registered with the U.S. Registry, namely:

- 1) aircraft owned by individual citizens of foreign countries who are permanent residents of the U.S., and

- 2) aircraft owned by non-U.S. corporations which are organized and doing business under U.S. law as long as the aircraft are based and used primarily in the U.S.

The definition of a registered general aviation aircraft changed from 1977 to 1978 to include the two new groups. It is estimated that these aircraft comprise less than one half percent of the general aviation fleet.

Thus, these changes discussed above affected the contents of the Aircraft Registration Master File and consequently the survey results. While it is difficult to quantify the effects of the changes, FAA estimates that they caused the survey results to overestimate population and hours flown by not more than five percent.

All aircraft identified as general aviation in the file according to the definition in Section 1.2.1 comprise the sample frame with the following exceptions:

- 1) Aircraft registered to dealers.
- 2) Aircraft with "Sale Reported" or "Registration Pending" appearing in the record instead of the owner's name.
- 3) Aircraft with a known inaccurate owner's address.
- 4) Aircraft with missing state of registration, aircraft make-model-series code, or aircraft type information.

For calendar year 1981, the sample frame consisted of 257,686 general aviation aircraft records from which 22,980 records were sampled, yielding a 8.9 percent sample. Table B-1 and Figure B.1 show the distribution of the sample compared to that of the population by aircraft type. Table B-2 and Figure B.2 show similar distributions by FAA region. (See Appendix C for the FAA regional map.) These displays clearly demonstrate the disproportionality of the sample to the population, an intended result of the sample design to gain efficiency and to control errors.

B.2 DESCRIPTION OF SAMPLE DESIGN

The sample design employed was a stratified, systematic design from a random start. The sample was selected from a two-way stratified frame matrix. The two stratification criteria were:

TABLE B-1. SAMPLE AND POPULATION DISTRIBUTIONS BY AIRCRAFT TYPE

TYPE	POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Fixed Wing			
Piston			
1 engine, 1-3 seats	83,780	8,434	10.1
1 engine, 4+ seats	119,910	6,271	5.2
2 engines, 1-6 seats	18,715	1,704	9.1
2 engines, 7+ seats	10,138	1,458	14.4
Other Piston	341	249	73.0
Turboprop			
2 engines, 1-12 seats	4,099	604	14.7
2 engines, 13+ seats	601	180	30.0
Other Turboprop	177	115	65.0
Turbojet			
2 engines	3,083	581	18.8
Other Turbojet	620	369	59.5
Rotorcraft			
Piston	5,437	1,070	19.7
Turbine	4,047	700	17.3
Other	6,738	1,245	18.5
TOTAL	257,686	22,980	8.9

TABLE B-2. SAMPLE AND POPULATION DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

REGION	APPROXIMATE POPULATION	SAMPLE SIZE	SAMPLE AS % OF POPULATION
Alaskan	7,781	885	11.4
Central	16,419	1,428	8.7
Eastern	26,945	2,731	10.1
European (Foreign)	307	77	25.1
Great Lakes	48,468	3,728	7.7
New England	8,457	1,575	18.6
Northwest Mountain	28,078	2,394	8.5
Southern	38,668	3,767	9.7
Southwestern	37,785	2,502	6.6
Western-Pacific	44,728	3,892	8.7
TOTAL	257,686	22,980	8.9

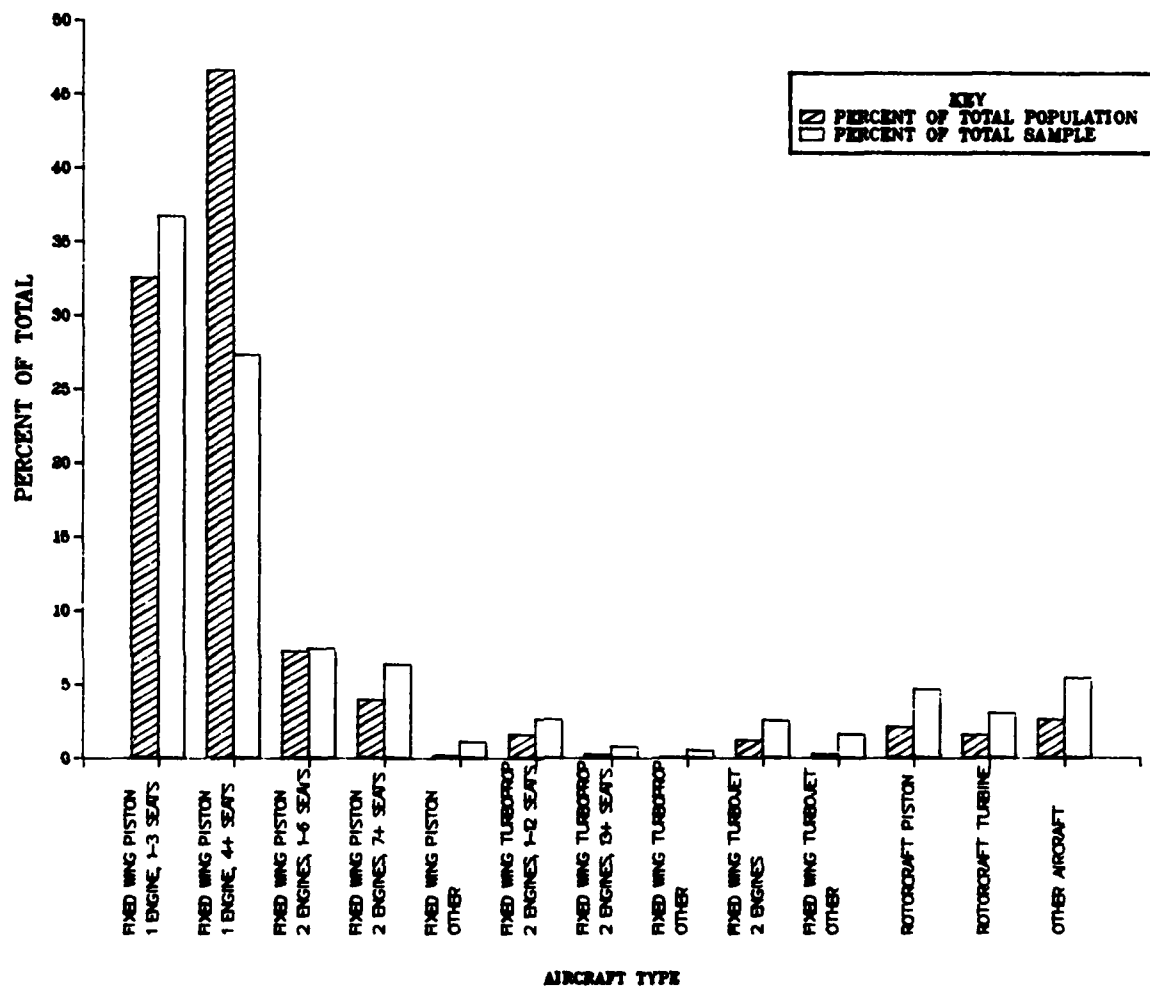


FIGURE B.1. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY AIRCRAFT TYPE

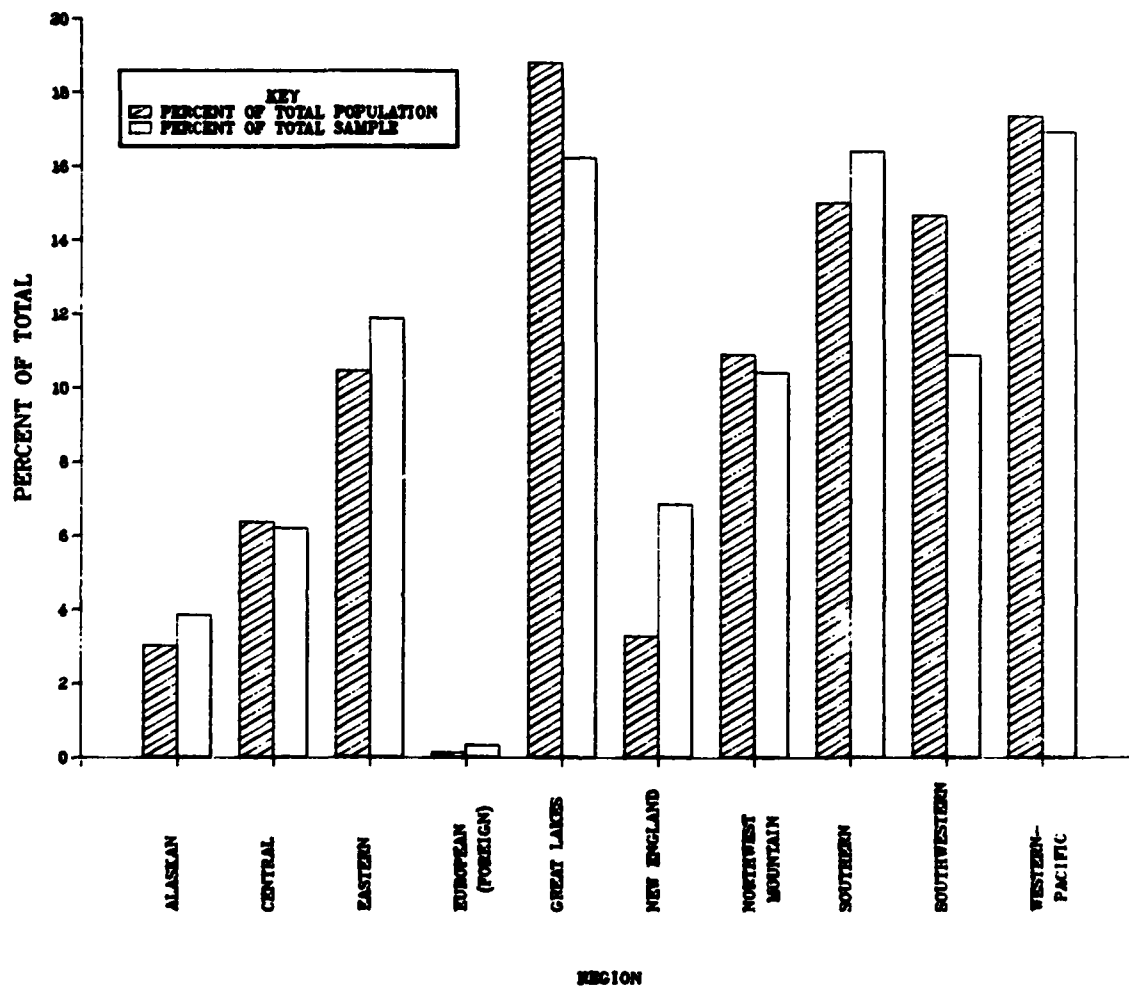


FIGURE B.2. COMPARISON OF POPULATION AND SAMPLE DISTRIBUTIONS BY REGION OF REGISTERED AIRCRAFT

- 1) State or territory of aircraft registration.
- 2) A variable called make-model index constructed from the thirteen aircraft types and the 300+ aircraft manufacturer/model groups of 20 or more general aviation aircraft as defined by the FAA's Service Difficulty Reporting (SDR) Program. (See Appendix D for the names and definitions of these groups.)

The 54 levels of the state criterion and the 345 levels of the make-model index yielded a matrix of 54 by 345 or 18,630 cells (strata) among which the frame was divided for sampling.

The FAA's primary requirement was for estimates of mean annual flight hours per aircraft, necessitating optimal determination of sample sizes based on flight hour variation by state and by make-model index, and not on population. Hence, the sample was not proportional to cell size, and a sampling fraction was determined for each cell with a non-zero population. Sampling was then performed systematically from a random start within individual cells.

Initially, each aircraft in the sample was given a weight which was the inverse of its cell's sampling fraction, and which corresponded to the number of aircraft in the sample frame represented by that aircraft. When all responses to the survey were tallied, each weight was adjusted according to the response rate for the aircraft's cell, counting an aircraft for which no survey questions were answered as a non-respondent and an aircraft for which at least one question was answered as a respondent. The weight adjustment is described below:

- 1) Non-respondents' weights were changed to zero.
- 2) The weights of all responding aircraft were adjusted uniformly by dividing the initial weights by the response rate.

This method of weight adjustment has several attributes. It actually incorporates the response rates into the final weights and simplifies estimation procedures.

B.3 ERROR

Errors associated with estimates derived from sample survey results fall into two categories: sampling and non-sampling errors.¹ Sampling errors occur because the estimates are based on a sample -- not the entire population. Non-sampling errors arise from a number of sources such as non-response, inability or unwillingness of respondents to provide correct information, differences in interpretation of questions, mistakes in recording or coding the data obtained, and others. The following sections discuss the two types of errors.

B.3.1 Sampling Error

In a designed survey, the sampling error associated with an estimate is generally unknown, but a measurable quantity known as the standard error is often used as a guide to the magnitude of sampling error. The standard error measures the variation which would occur among the estimates from all possible samples of the same design from the same population. It thus measures the precision with which an estimate approximates the average result of all possible samples or the result of a survey in which all elements of the population were sampled.

Through sample design techniques, the statistician can control the sizes of standard errors on a few key variables, known as design variables, in the survey. In the General Aviation Activity and Avionics Survey, the design variables were the mean annual hours flown per aircraft by aircraft type, by aircraft manufacturer/model group, and by state of aircraft registration. The sample was designed to produce standard errors on these variables at levels specified by the FAA. No controls were placed on the standard errors of the non-design variables.

Thus, every estimate resulting from a sample survey, whether it be for a design or non-design variable, has sampling error associated with it. The user of survey results must consider this error along with the point estimate itself when making inferences or drawing conclusions about the sample population. A large standard error relative to an estimate indicates lack of precision and, inversely, a small standard error indicates precision. To facilitate the comparison of estimates and their errors, the tables in Section 2 of this publication display standard errors for all estimated quantities. In some cases, the tables contain the percent standard

¹Standards for Discussion and Presentation of Errors in Data, U.S. Department of Commerce, Bureau of the Census, (Washington, DC, 1974), pp. 11-14.

error, which is the standard error divided by the corresponding estimate. The paragraphs below explain the proper interpretation and use of the errors.

An estimate and its standard error make it possible to construct an interval estimate with prescribed confidence that the interval will include the average value of the estimate from all possible samples of the population. Table B-3 below shows selected interval widths and their corresponding confidence.

TABLE B-3. CONFIDENCE OF INTERVAL ESTIMATES

WIDTH OF INTERVAL	APPROXIMATE CONFIDENCE THAT INTERVAL INCLUDES AVERAGE VALUE
1 Standard error	68%
2 Standard errors	95%
3 Standard errors	99%

As an example, from Table 2-6 a 95 percent confidence interval for the number of active rotorcraft with piston engines would be $3250 \pm 2(173)$ or (2904, 3596). One would say that the number of active rotorcraft with piston engines lies somewhere between 2904 and 3596 with 95 percent confidence.

B.3.2 Non-Sampling Error

Non-sampling error can be reduced through survey design, although the amount of reduction is difficult, if not impossible, to quantify in any given design. Nevertheless, through controlled experiments, various techniques have been identified which limit non-sampling error. Several of these techniques were incorporated into the design of the general aviation survey and are itemized below:

- o A second mailing to non-respondents was conducted in addition to the original mailing to improve the response rate, since a low response rate is a major cause of non-sampling error. 61 percent of those aircraft sampled responded to at least one question of the survey. This rate represents a decrease in response from 1977 when the survey achieved an 80 percent response rate and 1980 when the response rate was 65 percent. Possible causes of the decrease include:

- 1) The deterioration of the currency of aircraft owners' addresses in the Aircraft Registration Master File, the sample frame. This increased the percentage of questionnaires returned undelivered by the postmaster from around 1.6% in 1977 to 3.2% in 1978 to 6.8% in 1981, hence decreasing the response rate.
- 2) Repeated sampling of aircraft in two and possibly three or four successive years. Due to the design of the sample to achieve specified precision in estimates for states and manufacturer model groups of aircraft, it is impossible to avoid sampling some of the same aircraft in consecutive years. Owners of such aircraft may have been less willing to respond in 1981 than in previous years.

Tables B-4 and B-5 show the response rates broken down by FAA region and aircraft type, respectively. The lowest response rate for any region was 9% for the European (Foreign) Region due to mail delivery difficulties. The Alaskan Region rate was low at 49% for similar reasons. These two regions together, however, represented only about 3% of the U.S general aviation fleet. The fixed wing piston other (3 or more engines) category had the lowest response rate at 39% of any of the aircraft types but these aircraft represented less than 1% of the fleet.

- o The survey questionnaire was designed and tested to minimize misinterpretation of questions by the aircraft owners.
- o To assure the owners of the confidentiality of their responses, the questionnaire cover letter informed them that the intended use of the responses was "only to produce summary statistics and not to disclose individual operations nor to make changes to your aircraft records."¹
- o Comprehensive editing procedures insured the accuracy of the data transcription to machine readable form and the internal consistency of responses.
- o The official and most accurate source of information available on the general aviation fleet, the FAA Aircraft Registration Master File, was used as the sampling frame.

¹See Appendix A.1.

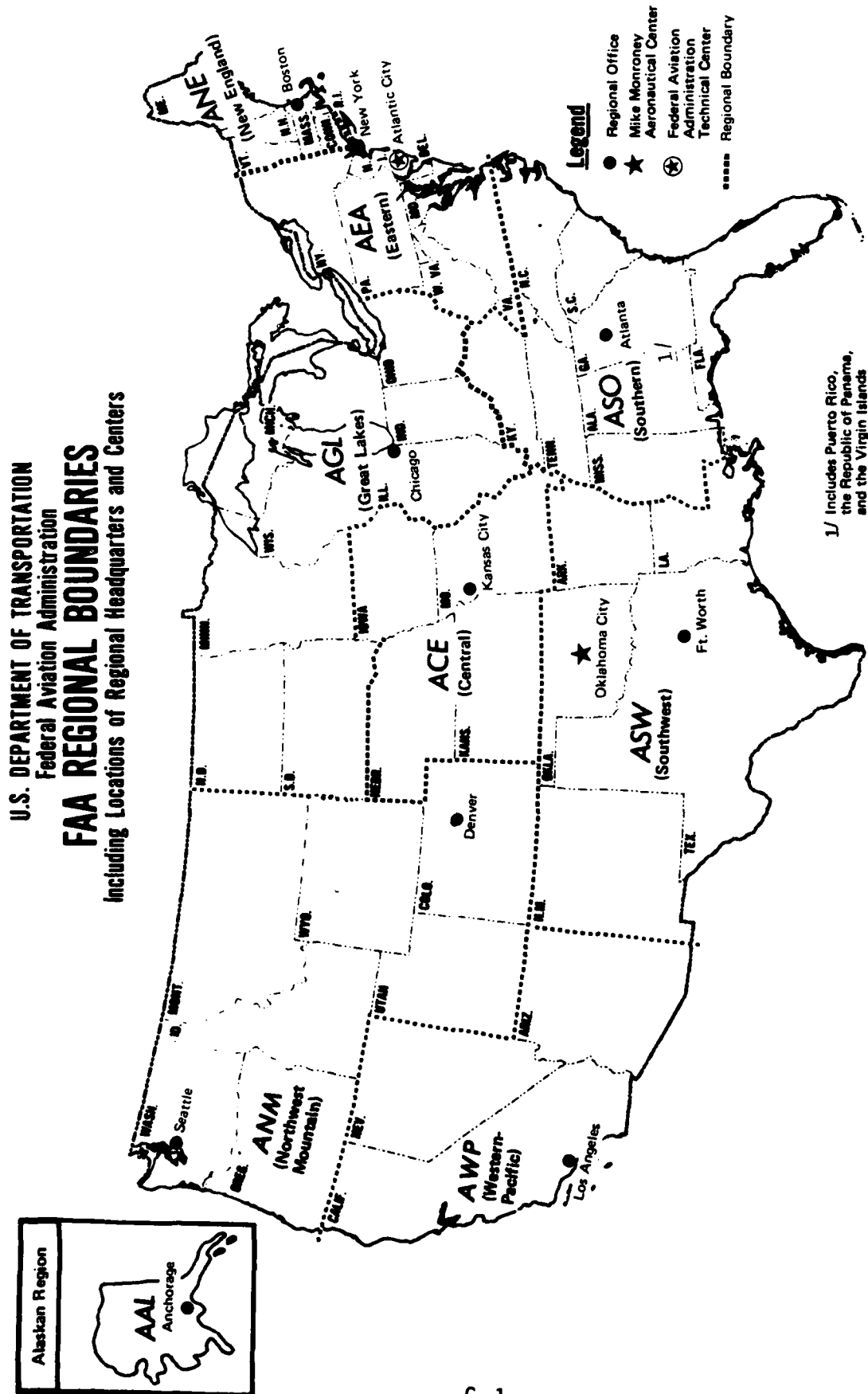
TABLE B-4. RESPONSE RATES BY REGION

REGION	RESPONSE RATE (%)	REGION	RESPONSE RATE (%)
Alaskan	49	New England	64
Central	64	Northwest Mountain	59
Eastern	62	Southern	57
European (Foreign)	9	Southwestern	59
Great Lakes	67	Western-Pacific	60
		<hr/>	
		TOTAL	61

TABLE B-5. RESPONSE RATES BY AIRCRAFT TYPE

AIRCRAFT TYPE	RESPONSE RATE (%)	AIRCRAFT TYPE	RESPONSE RATE (%)
Fixed Wing			
Piston		Turbojet	
1 engine, 1-3 seats	64	2 engines	73
1 engine, 4+ seats	62	Other	52
2 engines, 1-6 seats	57		
2 engines, 7+ seats	46	Rotorcraft	
Other	39	Piston	57
		Turbine	54
Turboprop			
2 engines, 1-12 seats	65	Other	59
2 engines, 13+ seats	64		
Other	57	<hr/>	
		TOTAL	61

APPENDIX C. FAA REGIONAL BOUNDARIES



APPENDIX D.

SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THIS TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) AIRCRAFT GROUP NAMES AND THE FAA AIRCRAFT MANUFACTURER/MODEL/SERIES (MMS) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MMS CODES FOR AIRCRAFT OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN SEVERAL OF THE TABLES IN THE BODY OF THIS REPORT.

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES

FAA	SDR	FAA	SDR	FAA	SDR
0050101	ADAMS A50S	*FALC10	AMD FALC10	0191004	AKONCAU58
0050103	ADAMS A50S	2730101	AMD FALC10	0191006	AKONCAU58
0050105	ADAMS A50S	*FALC20	AMD FALC20	0191008	AKONCAU58
5500604	AERUKSJ2	2720302	AMD FALC20	0191010	AKONCAU58
8680805	AEROSPAS355	2720303	AMD FALC20	0191012	AKONCAU58
8680207	AERUSPSA316	2720304	AMD FALC20	0900102	AVIANW FALCON
8680513	AERUSPSA316	2720305	AMD FALC20	0900104	AVIANW SKYHAWK
8680515	AERUSPSA316	2720306	AMD FALC20	0143002	AYRES S2
8680605	AERUSPSA316	2730103	AMD FALC20	0143004	AYRES S2
8680615	AERUSPSA316	2730106	AMD FALC20	0143006	AYRES S2
8680610	AERUSPSA341	4220120	AMTK THK	0143008	AYRES S2
1181414	AGUSTA205	8141617	AKCKNEH37	0143010	AYRES S2
0260109	AGUSTAA109	8142801	AKCKNEH37	0143012	AYRES S2
0144202	AIRPTSA	1850202	AKTICS1A	0143022	AYRES S2
0144204	AIRPTSA	1850204	AKTICS1A	0970101	AYRES S2
0144206	AIRPTSA	1850206	AKTICS1A	0970102	AYRES S2
1850102	AIRPTSA	1850208	AKTICS1A	0970104	AYRES S2
1850104	AIRPTSA	1850210	AKTICS1A	0970106	AYRES S2
1850106	AIRPTSA	1850212	AKTICS1A	0970215	AYRES S2
1850108	AIRPTSA	1850214	AKTICS1A	7630202	AYRES S2
1850110	AIRPTSA	1850216	AKTICS1A	7630203	AYRES S2
1850112	AIRPTSA	1850302	AKTICS1B1	7630204	AYRES S2
1850114	AIRPTSA	1850304	AKTICS1B1	8380202	AYRES S2
1850116	AIRPTSA	1850306	AKTICS1B1	8380204	AYRES S2
1850118	AIRPTSA	1850308	AKTICS1B1	8380206	AYRES S2
1850120	AIRPTSA	1850310	AKTICS1B1	8380302	AYRES S2
1850122	AIRPTSA	1850312	AKTICS1B1	8380306	AYRES S2
4570424	AIRPTSA	0191202	AKONCA15	1480202	BAC 111
4570602	AIRPTSA	0191204	AKONCA15	1480204	BAC 111
4570604	AIRPTSA	0190708	AKONCA65	1480208	BAC 111
4570606	AIRPTSA	0190710	AKONCA65	1480210	BAC 111
4570608	AIRPTSA	0190802	AKONCA65	1480218	BAC 111
4570610	AIRPTSA	0190902	AKONCA65	1480221	BAC 111
4570612	AIRPTSA	0190904	AKONCA65	1480264	BAC 111
4570614	AIRPTSA	0190906	AKONCA65	1480268	BAC 111
4570616	AIRPTSA	0190908	AKONCA65	1480270	BAC 111
4570618	AIRPTSA	0190910	AKONCA65	1480273	BAC 111
4570620	AIRPTSA	0190912	AKONCA65	1480277	BAC 111
4570622	AIRPTSA	0190914	AKONCA65	1480280	BAC 111
4570624	AIRPTSA	0190916	AKONCA65	1480283	BAC 111
0440102	AIRSPC18	0190918	AKONCA65	1121223	BAG B206
0440104	AIRSPC18	0191014	AKONCA65	1121224	BAG B206
9200202	AIRSPC18	0191016	AKONCA65	4230170	BAG DH125
0390101	AIRTRCAT300	0190302	AKONCAC3	1050100	BALWKSFLREFY
0390103	AIRTRCAT300	0190304	AKONCAC3	1050101	BALWKSFLREFY
0390104	AIRTRCAT300	0191002	AKONCAU58	1050103	BALWKSFLREFY

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1050104	BALWKSFIREFY	1150906	BEECH 18	1151212	BEECH 23
1050107	BALWKSFIREFY	1150907	BEECH 18	1151214	BEECH 23
1050109	BALWKSFIREFY	1150908	BEECH 18	1151215	BEECH 23
10501A9	BALWKSFIREFY	1150909	BEECH 18	1151216	BEECH 23
1152915	BEECH 100	1150910	BEECH 18	1151226	BEECH 23
1152916	BEECH 100	1150911	BEECH 18	1151230	BEECH 23
1152917	BEECH 100	1150912	BEECH 18	1151240	BEECH 23
1152919	BEECH 100	1150913	BEECH 18	1151242	BEECH 23
1150502	BEECH 17	1150914	BEECH 18	1151250	BEECH 23
1150504	BEECH 17	1150916	BEECH 18	1151252	BEECH 23
1150506	BEECH 17	1150918	BEECH 18	1151253	BEECH 23
1150508	BEECH 17	1150920	BEECH 18	1151254	BEECH 23
1150510	BEECH 17	1150922	BEECH 18	1151402	BEECH 33
1150512	BEECH 17	1150924	BEECH 18	1151404	BEECH 33
1150514	BEECH 17	1150926	BEECH 18	1151406	BEECH 33
1150516	BEECH 17	1150928	BEECH 18	1151408	BEECH 33
1150518	BEECH 17	1150930	BEECH 18	1151410	BEECH 33
1150520	BEECH 17	1150932	BEECH 18	1151414	BEECH 33
1150522	BEECH 17	1151001	BEECH 18	1151418	BEECH 33
1150524	BEECH 17	1151002	BEECH 18	1151422	BEECH 33
1150526	BEECH 17	1151004	BEECH 18	1151423	BEECH 33
1150528	BEECH 17	1151006	BEECH 18	1151424	BEECH 33
1150530	BEECH 17	1151007	BEECH 18	1151425	BEECH 33
1150532	BEECH 17	1151008	BEECH 18	1151432	BEECH 33
1150534	BEECH 17	1151009	BEECH 18	1151434	BEECH 33
1150536	BEECH 17	1151010	BEECH 18	1151435	BEECH 33
1150538	BEECH 17	1151011	BEECH 18	1151502	BEECH 35
1150540	BEECH 17	1151012	BEECH 18	1151504	BEECH 35
1150542	BEECH 17	1151013	BEECH 18	1151506	BEECH 35
1150544	BEECH 17	1151014	BEECH 18	1151508	BEECH 35
1150546	BEECH 17	1151015	BEECH 18	1151510	BEECH 35
1150548	BEECH 17	1151016	BEECH 18	1151512	BEECH 35
1150550	BEECH 17	1151018	BEECH 18	1151514	BEECH 35
1150552	BEECH 17	1151019	BEECH 18	1151516	BEECH 35
1150554	BEECH 17	1151020	BEECH 18	1151518	BEECH 35
1150556	BEECH 17	1151021	BEECH 18	1151520	BEECH 35
1150558	BEECH 17	1151022	BEECH 18	1151522	BEECH 35
1150560	BEECH 17	1151023	BEECH 18	1151524	BEECH 35
1150562	BEECH 17	1151024	BEECH 18	1151526	BEECH 35
1150564	BEECH 17	1151026	BEECH 18	1151528	BEECH 35
1150202	BEECH 18	1151040	BEECH 18	1151530	BEECH 35
1150204	BEECH 18	1151042	BEECH 18	1151532	BEECH 35
1150602	BEECH 18	1151044	BEECH 18	1151538	BEECH 35
1150604	BEECH 18	1151046	BEECH 18	1151540	BEECH 35
1150702	BEECH 18	1151048	BEECH 18	1151544	BEECH 35
1150704	BEECH 18	1151050	BEECH 18	1151546	BEECH 35
1150706	BEECH 18	1151102	BEECH 18	1151548	BEECH 35
1150708	BEECH 18	1152920	BEECH 200	1151550	BEECH 35
1150710	BEECH 18	1152921	BEECH 200	1151602	BEECH 36
1150712	BEECH 18	1152922	BEECH 200	1151603	BEECH 36
1150802	BEECH 18	1152924	BEECH 200	1151604	BEECH 36
1150804	BEECH 18	1152926	BEECH 200	1151605	BEECH 36
1150806	BEECH 18	1152928	BEECH 200	1151606	BEECH 36
1150808	BEECH 18	1151202	BEECH 23	1151607	BEECH 36
1150902	BEECH 18	1151204	BEECH 23	1152002	BEECH 45
1150904	BEECH 18	1151208	BEECH 23		

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1152004	BEECH 45	1152912	BEECH 90	118084G	BELL 47
1152006	BEECH 45	1152913	BEECH 90	118084H	BELL 47
1152008	BEECH 45	1152914	BEECH 90	118084K	BELL 47
1152010	BEECH 45	1153409	BEECH 90	118084M	BELL 47
1152012	BEECH 45	1153402	BEECH 95	118084P	BELL 47
1152013	BEECH 45	1153404	BEECH 95	118084R	BELL 47
1152014	BEECH 45	1153406	BEECH 95	118084V	BELL 47
1152015	BEECH 45	1153408	BEECH 95	1180902	BELL 47
1152016	BEECH 45	1153410	BEECH 95	1180904	BELL 47
1152502	BEECH 50	1153802	BEECH 99	1181001	BELL 47
1152504	BEECH 50	1154002	BEECH 99	1181002	BELL 47
1152506	BEECH 50	1154004	BEECH 99	1181003	BELL 47
1152508	BEECH 50	1154006	BEECH 99	1181004	BELL 47
1152510	BEECH 50	1161402	BELL 204	1181005	BELL 47
1152512	BEECH 50	1181404	BELL 204	1181006	BELL 47
1152514	BEECH 50	1181405	BELL 204	1181007	BELL 47
1152516	BEECH 50	1181408	BELL 204	1181008	BELL 47
1152518	BEECH 50	1181410	BELL 204	1181009	BELL 47
1152520	BEECH 50	1181411	BELL 204	118100V	BELL 47
1152522	BEECH 50	9680101	BELL 204	1181010	BELL 47
1152524	BEECH 50	9680102	BELL 204	1181011	BELL 47
1152526	BEECH 50	1181502	BELL 206	1181012	BELL 47
1152528	BEECH 50	1181503	BELL 206	1181013	BELL 47
1152530	BEECH 50	1181504	BELL 206	1181014	BELL 47
1152532	BEECH 50	1181506	BELL 206	1181016	BELL 47
1152534	BEECH 50	1181508	BELL 206	1181018	BELL 47
1152536	BEECH 50	1181510	BELL 206	1181020	BELL 47
1152702	BEECH 55	1181511	BELL 206	1181022	BELL 47
1152704	BEECH 55	1181512	BELL 206	1181023	BELL 47
1152706	BEECH 55	1181522	BELL 206	1181024	BELL 47
1152708	BEECH 55	1181579	BELL 206	1181025	BELL 47
1152728	BEECH 55	1182107	BELL 206	1181026	BELL 47
1152729	BEECH 55	1181420	BELL 212	1181027	BELL 47
1152730	BEECH 55	1182122	BELL 222	1181028	BELL 47
1152732	BEECH 55	1182202	BELL 412	1181029	BELL 47
1152736	BEECH 56	1180602	BELL 47	1181030	BELL 47
1152738	BEECH 56	1180603	BELL 47	1181031	BELL 47
1152740	BEECH 58	1180604	BELL 47	1181032	BELL 47
1152744	BEECH 58	1180606	BELL 47	1181033	BELL 47
1152746	BEECH 58	1180702	BELL 47	1181034	BELL 47
1153602	BEECH 60	1180704	BELL 47	118103M	BELL 47
1153604	BEECH 60	1180802	BELL 47	118103Z	BELL 47
1153605	BEECH 60	1180804	BELL 47	1181060	BELL 47
1152802	BEECH 65	1180806	BELL 47	1181063	BELL 47
1152803	BEECH 65	1180808	BELL 47	1181064	BELL 47
1152804	BEECH 65	1180810	BELL 47	1181065	BELL 47
1152805	BEECH 65	1180811	BELL 47	1181066	BELL 47
1153005	BEECH 76	1180812	BELL 47	1181067	BELL 47
1153007	BEECH 77	1180813	BELL 47	1181068	BELL 47
1152806	BEECH 80	1180814	BELL 47	1181070	BELL 47
1152807	BEECH 80	1180816	BELL 47	1181071	BELL 47
1152808	BEECH 80	1180820	BELL 47	1181073	BELL 47
1152809	BEECH 80	1180822	BELL 47	1181102	BELL 47
1152812	BEECH 80	1180843	BELL 47	1181103	BELL 47
1152814	BEECH 80	1180844	BELL 47	1181104	BELL 47
1153010	BEECH 80	1180845	BELL 47	1181106	BELL 47
1152902	BEECH 90	1180846	BELL 47	1181202	BELL 47
1152904	BEECH 90	118084C	BELL 47	1181310	BELL 47
1152907	BEECH 90	118084D	BELL 47	1181403	BELL 47
1152908	BEECH 90	118084E	BELL 47	1181585	BELL 47
1152909	BEECH 90	118084F	BELL 47	2390202	BELL 47

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
8930103	BELL 47	2110132	BLANCA7	7080221	BNORM BN2
0191102	BLANCA11	2110133	BLANCA7	7080227	BNORM BN2
0191104	BLANCA11	2110134	BLANCA7	1383601	BOEING707
0191106	BLANCA11	2110136	BLANCA7	1383602	BOEING707
0191108	BLANCA11	2110138	BLANCA7	1383604	BOEING707
0191110	BLANCA11	2110140	BLANCA7	1383605	BOEING707
0191112	BLANCA11	2110142	BLANCA7	1383606	BOEING707
9140404	BLANCA11	2110144	BLANCA7	1383608	BOEING707
9140408	BLANCA11	2110146	BLANCA7	1383609	BOEING707
1201002	BLANCA1413	2110148	BLANCA7	138360C	BOEING707
1201004	BLANCA1413	2110150	BLANCA7	138360F	BOEING707
1201006	BLANCA1413	2110152	BLANCA7	138360H	BOEING707
1201008	BLANCA1413	2110154	BLANCA7	138360K	BOEING707
1220402	BLANCA1419	2110156	BLANCA7	138360N	BOEING707
1220404	BLANCA1419	2110158	BLANCA7	138360P	BOEING707
1220406	BLANCA1419	2110160	BLANCA7	138360R	BOEING707
1220408	BLANCA1419	2110162	BLANCA7	138360T	BOEING707
3080102	BLANCA1419	2110164	BLANCA7	138360V	BOEING707
3080104	BLANCA1419	2110166	BLANCA7	138360X	BOEING707
3080106	BLANCA1419	2110168	BLANCA7	1383610	BOEING707
3080108	BLANCA1419	2110170	BLANCA7	1383612	BOEING707
3080112	BLANCA1419	2110172	BLANCA7	1383614	BOEING707
3080114	BLANCA1419	2110174	BLANCA7	1383616	BOEING707
3080116	BLANCA1419	2110176	BLANCA7	1383618	BOEING707
3080118	BLANCA1419	21101M2	BLANCA7	138361G	BOEING707
3080122	BLANCA1419	21101M6	BLANCA7	138365B	BOEING707
3080124	BLANCA1419	21101MA	BLANCA7	138365D	BOEING707
3080126	BLANCA1419	21101MF	BLANCA7	138365F	BOEING707
3080128	BLANCA1419	21101ML	BLANCA7	138365H	BOEING707
4580802	BLANCA1419	21101MR	BLANCA7	138365K	BOEING707
4580804	BLANCA1419	21101MW	BLANCA7	1383660	BOEING707
4580806	BLANCA1419	21101N2	BLANCA7	1383663	BOEING707
4580808	BLANCA1419	21101N7	BLANCA7	1383668	BOEING707
1220432	BLANCA17	21101NB	BLANCA7	138366B	BOEING707
1220433	BLANCA17	21101NB	BLANCA7	138366C	BOEING707
1220434	BLANCA17	21101NG	BLANCA7	138366D	BOEING707
1220435	BLANCA17	21101NM	BLANCA7	138366F	BOEING707
1220436	BLANCA17	21101NN	BLANCA7	138366H	BOEING707
1220437	BLANCA17	21101NS	BLANCA7	138366K	BOEING707
1220940	BLANCA17	21101NA	BLANCA7	138366M	BOEING707
0190107	BLANCA7	21101P3	BLANCA7	138366P	BOEING707
1220438	BLANCA7	21101PC	BLANCA7	1383677	BOEING707
1220460	BLANCA7	21101PH	BLANCA7	138367A	BOEING707
1220501	BLANCA7	21101PK	BLANCA7	138367B	BOEING707
1220601	BLANCA7	21101PN	BLANCA7	138367C	BOEING707
1220701	BLANCA7	21101PT	BLANCA7	138367D	BOEING707
2110102	BLANCA7	21101PY	BLANCA7	138367E	BOEING707
2110104	BLANCA7	1220801	BLANCA8	138367F	BOEING707
2110106	BLANCA7	1220803	BLANCA8	138367G	BOEING707
2110108	BLANCA7	1520202	BNORM BN2	138367H	BOEING707
2110110	BLANCA7	1520204	BNORM BN2	138367J	BOEING707
2110112	BLANCA7	1520206	BNORM BN2	138367K	BOEING707
2110114	BLANCA7	1520207	BNORM BN2	138367L	BOEING707
2110116	BLANCA7	1520209	BNORM BN2	138367M	BOEING707
2110118	BLANCA7	1520210	BNORM BN2	138367N	BOEING707
2110120	BLANCA7	1520215	BNORM BN2	138367P	BOEING707
2110122	BLANCA7	1520220	BNORM BN2	138367Q	BOEING707
2110124	BLANCA7	1520221	BNORM BN2	138367K	BOEING707
2110126	BLANCA7	1520226	BNORM BN2	138367S	BOEING707
2110128	BLANCA7	1520227	BNORM BN2	138367T	BOEING707
2110130	BLANCA7	1520302	BNORM BN2	138367U	BOEING707

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
138367V	BOEING707	1384030	BOEING727	1384454	BOEING737
138367W	BOEING707	1384032	BOEING727	1384457	BOEING737
138367X	BOEING707	1384035	BOEING727	1384458	BOEING737
138367Y	BOEING707	1384037	BOEING727	1384459	BOEING737
138368B	BOEING707	1384041	BOEING727	1384460	BOEING737
138368D	BOEING707	1384043	BOEING727	1384461	BOEING737
138368F	BOEING707	1384044	BOEING727	1384466	BOEING737
138368H	BOEING707	1384046	BOEING727	1384469	BOEING737
138368K	BOEING707	138404H	BOEING727	138446R	BOEING737
138368M	BOEING707	138404V	BOEING727	1384473	BOEING737
138369K	BOEING707	138404Z	BOEING727	1384476	BOEING737
1383701	BOEING707	1384056	BOEING727	1384477	BOEING737
1383706	BOEING707	1384057	BOEING727	1384478	BOEING737
1383802	BOEING720	1384058	BOEING727	1384479	BOEING737
1383804	BOEING720	1384059	BOEING727	1384480	BOEING737
1383810	BOEING720	1384063	BOEING727	1384484	BOEING737
1383814	BOEING720	1384067	BOEING727	1384488	BOEING737
1383818	BOEING720	138406G	BOEING727	138448A	BOEING737
1383822	BOEING720	138406N	BOEING727	138448B	BOEING737
1383826	BOEING720	1384071	BOEING727	138448C	BOEING737
1383830	BOEING720	1384073	BOEING727	138448D	BOEING737
1383841	BOEING720	1384074	BOEING727	138448E	BOEING737
1383845	BOEING720	1384075	BOEING727	138448F	BOEING737
1383849	BOEING720	1384076	BOEING727	138448G	BOEING737
1383853	BOEING720	1384077	BOEING727	138448J	BOEING737
1383857	BOEING720	1384078	BOEING727	138448M	BOEING737
1383861	BOEING720	1384079	BOEING727	138448N	BOEING737
1383865	BOEING720	138407E	BOEING727	138448P	BOEING737
1383869	BOEING720	138407F	BOEING727	138448K	BOEING737
1383873	BOEING720	138407G	BOEING727	138448S	BOEING737
1383877	BOEING720	138407K	BOEING727	138448T	BOEING737
1384001	BOEING727	138407L	BOEING727	138448V	BOEING737
1384002	BOEING727	138407M	BOEING727	138448W	BOEING737
1384003	BOEING727	138407N	BOEING727	138448Y	BOEING737
1384004	BOEING727	138407P	BOEING727	1384492	BOEING737
1384005	BOEING727	138407Q	BOEING727	1384494	BOEING737
1384006	BOEING727	138407K	BOEING727	1384801	BOEING747
1384008	BOEING727	138407S	BOEING727	1384802	BOEING747
138400B	BOEING727	138407T	BOEING727	1384803	BOEING747
138400C	BOEING727	138407W	BOEING727	1384804	BOEING747
138400E	BOEING727	138407Z	BOEING727	1384811	BOEING747
138400F	BOEING727	1384080	BOEING727	1384812	BOEING747
138400G	BOEING727	1384082	BOEING727	1384813	BOEING747
138400H	BOEING727	1384084	BOEING727	1384814	BOEING747
138400J	BOEING727	138408B	BOEING727	1384815	BOEING747
138400K	BOEING727	138408D	BOEING727	138481A	BOEING747
138400M	BOEING727	138408F	BOEING727	1384820	BOEING747
1384010	BOEING727	138408H	BOEING727	1384830	BOEING747
1384011	BOEING727	138408J	BOEING727	1384849	BOEING747
1384012	BOEING727	138408L	BOEING727	1384856	BOEING747
1384013	BOEING727	138408M	BOEING727	1384866	BOEING747
1384014	BOEING727	138408N	BOEING727	1384867	BOEING747
1384015	BOEING727	138408W	BOEING727	1384868	BOEING747
1384016	BOEING727	138408X	BOEING727	1384869	BOEING747
1384017	BOEING727	13840A2	BOEING727	1384871	BOEING747
1384018	BOEING727	13840XY	BOEING727	1384872	BOEING747
1384019	BOEING727	1384402	BOEING737	1384873	BOEING747
1384025	BOEING727	1384404	BOEING737	1384874	BOEING747
1384027	BOEING727	1384435	BOEING737	1384880	BOEING747
1384028	BOEING727	1384438	BOEING737	1384881	BOEING747
138402C	BOEING727	1384453	BOEING737	1384882	BOEING747

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
1384883	BOEING747	4490102	BRASOVIS28	2072421	CESSNA172
1384885	BOEING747	1461202	BRWSTKFLEET2	2072424	CESSNA172
1384886	BOEING747	1461204	BRWSTKFLEET2	2072425	CESSNA172
1384888	BOEING747	1461502	BRWSTKFLEET7	2072426	CESSNA172
1384889	BOEING747	1461504	BRWSTKFLEET7	2072428	CESSNA172
1384890	BOEING747	1461506	BRWSTKFLEET7	2072429	CESSNA172
1384891	BOEING747	1461512	BRWSTKFLEET7	2072430	CESSNA172
1384892	BOEING747	1461514	BRWSTKFLEET7	2072431	CESSNA172
1384893	BOEING747	1461516	BRWSTKFLEET7	2072432	CESSNA172
1384894	BOEING747	1590104	BUKER 131	2072434	CESSNA172
1384895	BOEING747	1590114	BUKER 131	2072436	CESSNA172
1384896	BOEING747	1880104	CAMKONMODELO	2072438	CESSNA172
1384897	BOEING747	1880106	CAMKONMODELO	2072443	CESSNA172
1384898	BOEING747	1880108	CAMKONMODELO	2072502	CESSNA175
1384899	BOEING747	1880110	CAMKONMODELO	2072504	CESSNA175
1384901	BOEING747	1880112	CAMKONMODELO	2072506	CESSNA175
1384902	BOEING747	1880113	CAMKONMODELO	2072508	CESSNA175
1384903	BOEING747	1880120	CAMKONMODELO	2073704	CESSNA177
1380102	BOEING75	1880122	CAMKONMODELO	2073706	CESSNA177
1380104	BOEING75	1880201	CAMKONMODELO	2073708	CESSNA177
1380106	BOEING75	1880202	CAMKONMODELO	2073709	CESSNA177
1380108	BOEING75	1880203	CAMKONMODELO	2072602	CESSNA180
1380110	BOEING75	1880204	CAMKONMODELO	2072604	CESSNA180
1380112	BOEING75	1880225	CAMKONMODELO	2072606	CESSNA180
1380114	BOEING75	2071402	CESSNA120	2072608	CESSNA180
1380116	BOEING75	2071602	CESSNA140	2072610	CESSNA180
1380118	BOEING75	2071604	CESSNA140	2072612	CESSNA180
1380120	BOEING75	2071802	CESSNA150	2072614	CESSNA180
1380121	BOEING75	2071804	CESSNA150	2072616	CESSNA180
1380122	BOEING75	2071806	CESSNA150	2072618	CESSNA180
1380124	BOEING75	2071808	CESSNA150	2072622	CESSNA180
1380128	BOEING75	2071810	CESSNA150	2072624	CESSNA180
1380130	BOEING75	2071812	CESSNA150	2072702	CESSNA182
1380131	BOEING75	2071814	CESSNA150	2072704	CESSNA182
1380132	BOEING75	2071816	CESSNA150	2072706	CESSNA182
1380134	BOEING75	2071818	CESSNA150	2072708	CESSNA182
1380136	BOEING75	2071820	CESSNA150	2072710	CESSNA182
1380137	BOEING75	2071822	CESSNA150	2072712	CESSNA182
1380138	BOEING75	2071824	CESSNA150	2072714	CESSNA182
1380140	BOEING75	2071826	CESSNA150	2072716	CESSNA182
1380142	BOEING75	2071828	CESSNA150	2072718	CESSNA182
1380144	BOEING75	2071830	CESSNA150	2072722	CESSNA182
1380146	BOEING75	2071831	CESSNA150	2072724	CESSNA182
1380148	BOEING75	2071835	CESSNA150	2072726	CESSNA182
1380150	BOEING75	2071836	CESSNA150	2072728	CESSNA182
1380152	BOEING75	2072302	CESSNA170	2072730	CESSNA182
1380154	BOEING75	2072304	CESSNA170	2072731	CESSNA182
1406006	BOLKMS105	2072306	CESSNA170	2072732	CESSNA182
5626005	BOLKMS105	2072202	CESSNA172	2072734	CESSNA182
5626006	BOLKMS105	2072402	CESSNA172	2072735	CESSNA182
1500204	BRAERUDH125	2072404	CESSNA172	2072736	CESSNA182
1500205	BRAERUDH125	2072406	CESSNA172	2075802	CESSNA182
4230101	BRAERUDH125	2072408	CESSNA172	2075806	CESSNA182
4230106	BRAERUDH125	2072410	CESSNA172	2075814	CESSNA182
4230110	BRAERUDH125	2072412	CESSNA172	2075816	CESSNA182
4230126	BRAERUDH125	2072413	CESSNA172	2072802	CESSNA185
4230138	BRAERUDH125	2072414	CESSNA172	2072804	CESSNA185
423013M	BRAERUDH125	2072416	CESSNA172	2072806	CESSNA185
423013P	BRAERUDH125	2072417	CESSNA172	2072808	CESSNA185
4230140	BRAERUDH125	2072418	CESSNA172	2072812	CESSNA185
4230158	BRAERUDH125	2072420	CESSNA172	2072816	CESSNA185

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
2072818	CESSNA185	2073414	CESSNA210	2074502	CESSNA320
2072820	CESSNA185	2073416	CESSNA210	2074504	CESSNA320
2072821	CESSNA185	2073418	CESSNA210	2074506	CESSNA320
2073002	CESSNA188	2073422	CESSNA210	2074508	CESSNA320
2073004	CESSNA188	2073430	CESSNA210	2074510	CESSNA320
2073005	CESSNA188	2073432	CESSNA210	2074512	CESSNA320
2073006	CESSNA188	2073436	CESSNA210	2074514	CESSNA320
2073007	CESSNA188	2073438	CESSNA210	2074516	CESSNA320
2073008	CESSNA188	2073439	CESSNA210	2075601	CESSNA335
2073010	CESSNA188	2073440	CESSNA210	2075602	CESSNA336
2073011	CESSNA188	2073446	CESSNA210	2075702	CESSNA337
2073012	CESSNA188	2073447	CESSNA210	2075703	CESSNA337
2072902	CESSNA190	2073448	CESSNA210	2075704	CESSNA337
2073102	CESSNA195	2073449	CESSNA210	2075706	CESSNA337
2073104	CESSNA195	2073450	CESSNA210	2075707	CESSNA337
2073106	CESSNA195	2073451	CESSNA210	2075708	CESSNA337
2073108	CESSNA195	2073453	CESSNA210	2075712	CESSNA337
2073110	CESSNA195	2073454	CESSNA210	2075714	CESSNA337
2073112	CESSNA195	2073456	CESSNA210	2075717	CESSNA337
2073302	CESSNA206	2073902	CESSNA305	2075719	CESSNA337
2073304	CESSNA206	2074001	CESSNA305	2075721	CESSNA337
2073306	CESSNA206	2074002	CESSNA305	2075723	CESSNA337
2073308	CESSNA206	2074003	CESSNA305	2075724	CESSNA337
2073309	CESSNA206	2074004	CESSNA305	2075725	CESSNA337
2073310	CESSNA206	2074005	CESSNA305	2075726	CESSNA337
2073311	CESSNA206	2074006	CESSNA305	2075727	CESSNA337
2073312	CESSNA206	2074008	CESSNA305	2075730	CESSNA337
2073313	CESSNA206	2074010	CESSNA305	2075731	CESSNA337
2073316	CESSNA206	2074012	CESSNA305	2075732	CESSNA337
2073317	CESSNA206	2074014	CESSNA305	2075733	CESSNA337
2073318	CESSNA206	2074016	CESSNA305	2076404	CESSNA340
2073319	CESSNA206	2074018	CESSNA305	2076405	CESSNA340
2073322	CESSNA206	2074028	CESSNA305	207590C	CESSNA401
2073324	CESSNA206	2074030	CESSNA305	207590D	CESSNA401
2073332	CESSNA206	2074032	CESSNA305	207590E	CESSNA401
2073333	CESSNA206	207408D	CESSNA305	207590K	CESSNA402
2073334	CESSNA206	207408E	CESSNA305	207590L	CESSNA402
2073338	CESSNA206	207408K	CESSNA305	207590H	CESSNA402
2073340	CESSNA206	2074202	CESSNA310	207590P	CESSNA402
2073342	CESSNA206	2074204	CESSNA310	207590K	CESSNA402
2073344	CESSNA206	2074206	CESSNA310	2075901	CESSNA404
2073346	CESSNA206	2074208	CESSNA310	2075902	CESSNA411
2073348	CESSNA206	2074210	CESSNA310	2075904	CESSNA411
2073350	CESSNA206	2074212	CESSNA310	2075907	CESSNA414
2073352	CESSNA206	2074214	CESSNA310	2075908	CESSNA414
2073353	CESSNA206	2074216	CESSNA310	2076010	CESSNA421
2073356	CESSNA206	2074218	CESSNA310	2076012	CESSNA421
2073357	CESSNA206	2074220	CESSNA310	2076014	CESSNA421
2073602	CESSNA207	2074222	CESSNA310	2076016	CESSNA421
2073604	CESSNA207	2074224	CESSNA310	2076018	CESSNA425
2073612	CESSNA207	2074226	CESSNA310	2076020	CESSNA441
2073614	CESSNA207	2074228	CESSNA310	2076602	CESSNA500
2073202	CESSNA210	2074230	CESSNA310	2076604	CESSNA500
2073204	CESSNA210	2074234	CESSNA310	2071302	CESSNAT50
2073402	CESSNA210	2074236	CESSNA310	2071304	CESSNAT50
2073403	CESSNA210	2074238	CESSNA310	2071305	CESSNAT50
2073404	CESSNA210	2074240	CESSNA310	2071306	CESSNAT50
2073406	CESSNA210	2074242	CESSNA310	2071307	CESSNAT50
2073408	CESSNA210	2074244	CESSNA310	2071308	CESSNAT50
2073410	CESSNA210	2074245	CESSNA310	2070902	CESSNAUC94
2073412	CESSNA210	2074246	CESSNA310	2071002	CESSNAUC94

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GENERAL AVIATION ACTIVITY AND AVIONICS SURVEY(U)
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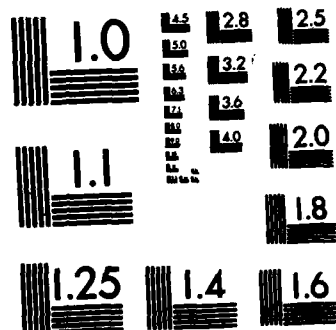


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TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
2071102	C6SSNAUC94	2621404	CURTISTRVAIR	2422646	CVAC 240
2071104	C6SSNAUC94	2621406	CURTISTRVAIR	2422647	CVAC 240
0110201	CHILD S2	2621408	CURTISTRVAIR	2422648	CVAC 240
2370602	COMWTH185	2621502	CURTISTKVAIR	2422702	CVAC 340
2370604	COMWTH185	2621504	CURTISTKVAIR	2422704	CVAC 340
2370608	COMWTH185	2621506	CURTISTKVAIR	2422706	CVAC 340
2400102	CONAERLA4	2621508	CURTISTKVAIR	2422708	CVAC 340
2400108	CONAERLA4	2621602	CURTISTKVAIR	242270A	CVAC 340
2400110	CONAERLA4	2621604	CURTISTRVAIR	242270H	CVAC 340
5110102	CONAERLA4	2621606	CURTISTKVAIR	2422712	CVAC 340
5110104	CONAERLA4	2621608	CURTISTKVAIR	2422714	CVAC 340
5110202	CONAERLA4	2621702	CURTISTKVAIR	2422716	CVAC 340
5110204	CONAERLA4	2621704	CURTISTRVAIR	2422718	CVAC 340
5110302	CONAERLA4	2621802	CURTISTRVAIR	2422742	CVAC 340
5110304	CONAERLA4	2621804	CURTISTKVAIR	2420202	CVAC BT13
5110306	CONAERLA4	2621806	CURTISTRVAIR	2420204	CVAC BT13
5110308	CONAERLA4	2621808	CURTISTKVAIR	2420206	CVAC BT13
5110310	CONAERLA4	2621810	CURTISTRVAIR	2420208	CVAC BT13
5110312	CONAERLA4	2621812	CURTISTRVAIR	2420210	CVAC BT13
5110314	CONAERLA4	2621814	CURTISTKVAIR	2420222	CVAC BT13
5110316	CONAERLA4	2621816	CURTISTRVAIR	2420224	CVAC BT13
5110320	CONAERLA4	2621818	CURTISTRVAIR	2420226	CVAC BT13
2622601	CURTISC46	2621820	CURTISTRVAIR	2420228	CVAC BT13
2622602	CURTISC46	2621822	CURTISTKVAIR	2420230	CVAC BT13
2622604	CURTISC46	2621824	CURTISTKVAIR	2420702	CVAC L13
2622606	CURTISC46	2621826	CURTISTRVAIR	2420704	CVAC L13
2622608	CURTISC46	2621828	CURTISTRVAIR	2420706	CVAC L13
2622610	CURTISC46	2621830	CURTISTRVAIR	*STC580	CVAC STC580
2622624	CURTISC46	2621832	CURTISTKVAIR	2422801	CVAC STC580
2622701	CURTISC46	2621902	CURTISTRVAIR	2422802	CVAC STC580
2622702	CURTISC46	2621904	CURTISTRVAIR	2422804	CVAC STC580
2622704	CURTISC46	2621906	CURTISTRVAIR	2422806	CVAC STC580
2622706	CURTISC46	2621908	CURTISTRVAIR	2423001	CVAC STC580
2622708	CURTISC46	2423302	CVAC 22	2423002	CVAC STC580
2622710	CURTISC46	2423304	CVAC 22	2700102	DART G
2622750	CURTISC46	3790104	CVAC 22	2700104	DART G
2620502	CURTISJK	2422601	CVAC 240	2700106	DART G
2620802	CURTISROBIN	2422602	CVAC 240	2700108	DART G
2620804	CURTISROBIN	2422604	CVAC 240	2801702	DHAV DHC1
2620806	CURTISROBIN	2422606	CVAC 240	2801704	DHAV DHC1
2620808	CURTISROBIN	2422608	CVAC 240	2801712	DHAV DHC1
2620810	CURTISROBIN	2422610	CVAC 240	2801714	DHAV DHC1
2620812	CURTISROBIN	2422612	CVAC 240	2801716	DHAV DHC1
2620814	CURTISROBIN	2422614	CVAC 240	2801736	DHAV DHC1
2621002	CURTISTRVAIR	2422616	CVAC 240	2801738	DHAV DHC1
2621004	CURTISTKVAIR	2422618	CVAC 240	2801739	DHAV DHC1
2621006	CURTISTKVAIR	2422620	CVAC 240	*DHC2	DHAV DHC2
2621008	CURTISTKVAIR	2422622	CVAC 240	2800102	DHAV DHC2
2621010	CURTISTRVAIR	2422624	CVAC 240	2800103	DHAV DHC2
2621012	CURTISTRVAIR	2422626	CVAC 240	2800104	DHAV DHC2
2621102	CURTISTRVAIR	2422628	CVAC 240	2800105	DHAV DHC2
2621104	CURTISTRVAIR	2422630	CVAC 240	2800106	DHAV DHC2
2621106	CURTISTRVAIR	2422632	CVAC 240	2800107	DHAV DHC2
2621108	CURTISTRVAIR	2422633	CVAC 240	2800108	DHAV DHC2
2621202	CURTISTRVAIR	2422634	CVAC 240	2800109	DHAV DHC2
2621204	CURTISTKVAIR	2422636	CVAC 240	2800115	DHAV DHC2
2621302	CURTISTKVAIR	2422638	CVAC 240	2801830	DHAV DHC2
2621304	CURTISTKVAIR	2422640	CVAC 240	2801832	DHAV DHC2
2621306	CURTISTKVAIR	2422642	CVAC 240	*DHC6	DHAV DHC6
2621308	CURTISTRVAIR	2422644	CVAC 240	2802606	DHAV DHC6
2621402	CURTISTKVAIR	2422645	CVAC 240	2802610	DHAV DHC6

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
2802620	DHAY DHC6	3021458	DOUG DC3	3021908	DOUG DC8
2802630	DHAY DHC6	3021459	DOUG DC3	302190D	DOUG DC8
2801000	DHAYXXDH82	3021460	DOUG DC3	302190F	DOUG DC8
2801002	DHAYXXDH82	3021461	DOUG DC3	302190H	DOUG DC8
2801006	DHAYXXDH82	3021462	DOUG DC3	3021910	DOUG DC8
2801020	DHAYXXDH82	3021463	DOUG DC3	3021912	DOUG DC8
3020502	DOUG A26	3021464	DOUG DC3	3021914	DOUG DC8
3020504	DOUG A26	3021466	DOUG DC3	3021916	DOUG DC8
3020506	DOUG A26	3021467	DOUG DC3	3021918	DOUG DC8
3020510	DOUG A26	3021468	DOUG DC3	3021918	DOUG DC8
3020512	DOUG A26	3021469	DOUG DC3	302191D	DOUG DC8
3020514	DOUG A26	302146T	DOUG DC3	302191F	DOUG DC8
3020516	DOUG A26	302146X	DOUG DC3	302191H	DOUG DC8
3020518	DOUG A26	302146Y	DOUG DC3	302191K	DOUG DC8
3020524	DOUG A26	302146Z	DOUG DC3	3021920	DOUG DC8
3020525	DOUG A26	3021470	DOUG DC3	3021922	DOUG DC8
3020526	DOUG A26	3021471	DOUG DC3	3021924	DOUG DC8
3020527	DOUG A26	3021472	DOUG DC3	3021925	DOUG DC8
3021401	DOUG DC3	3021473	DOUG DC3	3021926	DOUG DC8
3021402	DOUG DC3	3021474	DOUG DC3	3021927	DOUG DC8
3021404	DOUG DC3	3021476	DOUG DC3	3021928	DOUG DC8
3021406	DOUG DC3	3021478	DOUG DC3	3021928	DOUG DC8
3021410	DOUG DC3	302147H	DOUG DC3	302192D	DOUG DC8
3021412	DOUG DC3	3021480	DOUG DC3	302192F	DOUG DC8
3021414	DOUG UC3	3021502	DOUG DC4	302192H	DOUG DC8
3021416	DOUG UC3	3021504	DOUG UC4	302192K	DOUG DC8
3021418	DOUG DC3	3021506	DOUG DC4	302192H	DOUG DC8
3021420	DOUG DC3	3021508	DOUG DC4	3021952	DOUG DC8
3021422	DOUG DC3	3021510	DOUG DC4	302195J	DOUG DC8
3021424	DOUG DC3	3021512	DOUG DC4	3021954	DOUG DC8
3021425	DOUG DC3	3021514	DOUG DC4	3021958	DOUG DC8
3021426	DOUG DC3	3021516	DOUG DC4	302195D	DOUG DC8
3021427	DOUG DC3	3021518	DOUG DC4	3021965	DOUG DC8
3021428	DOUG DC3	3021520	DOUG DC4	3021970	DOUG DC8
3021429	DOUG DC3	3021522	DOUG DC4	3021972	DOUG DC8
3021430	DOUG DC3	3021524	DOUG DC4	3021978	DOUG DC8
3021431	DOUG UC3	3021526	DOUG DC4	302197D	DOUG DC8
3021432	DOUG DC3	3021528	DOUG DC4	302198A	DOUG DC8
3021433	DOUG DC3	3021530	DOUG DC4	3021988	DOUG DC8
3021434	DOUG DC3	3021532	DOUG DC4	302198F	DOUG DC8
3021436	DOUG DC3	3021534	DOUG DC4	302198H	DOUG DC8
3021438	DOUG DC3	3021536	DOUG DC4	3022002	DOUG DC9
3021439	DOUG DC3	3021537	DOUG UC4	3022026	DOUG DC9
3021440	DOUG DC3	3021538	DOUG DC4	3022028	DOUG DC9
3021441	DOUG DC3	3021702	DOUG DC6	3022028	DOUG DC9
3021442	DOUG DC3	3021706	DOUG DC6	3022030	DOUG DC9
3021443	DOUG DC3	3021708	DOUG DC6	3022034	DOUG DC9
3021444	DOUG DC3	3021710	DOUG DC6	3022036	DOUG DC9
3021445	DOUG DC3	3021712	DOUG DC6	3022037	DOUG DC9
3021446	DOUG DC3	3021714	DOUG DC6	3022038	DOUG DC9
3021447	DOUG DC3	3021802	DOUG DC7	302203D	DOUG DC9
3021448	DOUG DC3	3021804	DOUG DC7	302203F	DOUG DC9
3021449	DOUG DC3	3021805	DOUG DC7	302203H	DOUG DC9
3021450	DOUG DC3	3021806	DOUG DC7	302203K	DOUG DC9
3021451	DOUG DC3	3021807	DOUG DC7	3022051	DOUG DC9
3021452	DOUG UC3	3021808	DOUG DC7	302205A	DOUG DC9
3021453	DOUG DC3	3021901	DOUG DC8	302205C	DOUG DC9
3021454	DOUG DC3	3021902	DOUG DC8	3022065	DOUG DC9
3021455	DOUG DC3	3021904	DOUG DC8	3022066	DOUG DC9
3021456	DOUG DC3	3021906	DOUG DC8	3022067	DOUG DC9
3021457	DOUG UC3	3021908	DOUG DC8	302206A	DOUG DC9

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
302206C	DOUG DC9	3370516	FRCHLD24	3910104	GRTLKS2T1
302206E	DOUG DC9	3370518	FRCHLD24	3910106	GRTLKS2T1
302207A	DOUG DC9	3370520	FRCHLD24	3910107	GRTLKS2T1
302207C	DOUG DC9	3370602	FRCHLD24	3910108	GRTLKS2T1
302207D	DOUG DC9	3370604	FRCHLD24	3950306	GRUMANTBM
302207N	DOUG DC9	3370606	FRCHLD24	3950308	GRUMANTBM
302207P	DOUG DC9	3370608	FRCHLD24	3950310	GRUMANTBM
3022080	DOUG DC9	3370610	FRCHLD24	0630820	GRUMAVAA1
3022081	DOUG DC9	3370612	FRCHLD24	0631202	GRUMAVAA1
3022082	DOUG DC9	3370614	FRCHLD24	0632001	GRUMAVAA1
5760102	EIRVON20	3370616	FRCHLD24	3960100	GRUMAVAA1
5760104	EIRVON20	3370618	FRCHLD24	3960101	GRUMAVAA1
5760202	EIRVON20	3370620	FRCHLD24	3960102	GRUMAVAA1
5760204	EIRVON20	3370622	FRCHLD24	3960103	GRUMAVAA1
5760206	EIRVON20	3370624	FRCHLD24	3960502	GRUMAVAA1
5760207	EIRVON20	3370626	FRCHLD24	0632005	GRUMAVAA5
3280103	EMAIR MA1	3370628	FRCHLD24	3960104	GRUMAVAA5
6070102	EMAIR MA1	3372102	FRCHLDC119	3960105	GRUMAVAA5
3260122	EMB 110	3372106	FRCHLDC119	3952801	GRUMAVG164
3260124	EMB 110	3372108	FRCHLDC119	3960201	GRUMAVG164
3300404	ENSTRMF28	3373002	FRCHLDF27	3960202	GRUMAVG164
3300405	ENSTRMF28	3373004	FRCHLDF27	3960203	GRUMAVG164
3300406	ENSTRMF28	3373006	FRCHLDF27	8052214	GRUMAVG164
3300407	ENSTRMF28	3373008	FRCHLDF27	8052215	GRUMAVG164
3300412	ENSTRMF28	3373010	FRCHLDF27	3951202	GRUMAVG21
3300424	ENSTRMF28	3373016	FRCHLDF27	3951204	GRUMAVG21
3300502	ENSTRMF28	3371602	FRCHLDM62	0144701	GULSTM112
3300505	ENSTRMF28	3371604	FRCHLDM62	7630302	GULSTM112
3300507	ENSTRMF28	3371606	FRCHLDM62	7630303	GULSTM112
3480502	FLEET 16B	3371608	FRCHLDM62	7630306	GULSTM112
3480504	FLEET 16B	3371609	FRCHLDM62	7630307	GULSTM112
3370202	FRCHLD24	3371610	FRCHLDM62	7630314	GULSTM112
3370204	FRCHLD24	3371612	FRCHLDM62	7630315	GULSTM112
3370206	FRCHLD24	3371614	FRCHLDM62	7630316	GULSTM112
3370208	FRCHLD24	3371616	FRCHLDM62	0141102	GULSTM500
3370210	FRCHLD24	3371618	FRCHLDM62	0141104	GULSTM500
3370212	FRCHLD24	3371620	FRCHLDM62	0141106	GULSTM500
3370214	FRCHLD24	3371622	FRCHLDM62	0141107	GULSTM500
3370216	FRCHLD24	3371624	FRCHLDM62	0141108	GULSTM500
3370218	FRCHLD24	3371626	FRCHLDM62	0141202	GULSTM520
3370220	FRCHLD24	3371628	FRCHLDM62	0141402	GULSTM560
3370222	FRCHLD24	3371630	FRCHLDM62	0141404	GULSTM560
3370224	FRCHLD24	3371632	FRCHLDM62	0141406	GULSTM560
3370302	FRCHLD24	3371634	FRCHLDM62	0141408	GULSTM680
3370304	FRCHLD24	3371636	FRCHLDM62	0141602	GULSTM680
3370402	FRCHLD24	3371638	FRCHLDM62	0141604	GULSTM680
3370404	FRCHLD24	3371640	FRCHLDM62	0141606	GULSTM680
3370406	FRCHLD24	3371642	FRCHLDM62	0141608	GULSTM680
3370408	FRCHLD24	3374004	FRCHLDM62	0141610	GULSTM680
3370410	FRCHLD24	3374006	FRCHLDM62	0141612	GULSTM680
3370412	FRCHLD24	3760102	GENBALAX6	0141802	GULSTM680
3370414	FRCHLD24	3760202	GENBALAX6	0141712	GULSTM680TP
3370416	FRCHLD24	3800335	GLASFLLIBELL	0141714	GULSTM680TP
3370418	FRCHLD24	3800337	GLASFLLIBELL	0141716	GULSTM680TP
3370502	FRCHLD24	3800339	GLASFLLIBELL	0141718	GULSTM680TP
3370504	FRCHLD24	3800341	GLASFLLIBELL	0141720	GULSTM690TP
3370506	FRCHLD24	3800344	GLASFLLIBELL	0141722	GULSTM690TP
3370508	FRCHLD24	3800346	GLASFLLIBELL	3970404	GULSTM690TP
3370510	FRCHLD24	1660104	GRUM ASTIR	3970410	GULSTM690TP
3370512	FRCHLD24	3910101	GRTLKS2T1	3970411	GULSTM690TP
3370514	FRCHLD24	3910102	GRTLKS2T1	7630516	GULSTM690TP

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
0630610	GULSTMAA1	4360130	HILLERUM12	8850408	KUHLOWD
0630710	GULSTMAA1	4360135	HILLERUM12	8850410	KUHLOWD
0631206	GULSTMAA1	4360809	HILLERUM12	8850412	KUHLOWD
0631214	GULSTMAA1	4470402	HUGHES269	8850414	KUHLOWD
0631410	GULSTMAA5	4470403	HUGHES269	8850416	KUHLOWD
3960105	GULSTMAA5	4470404	HUGHES269	8850418	KUHLOWD
3960106	GULSTMAA5	4470406	HUGHES269	8850420	KUHLOWD
3960107	GULSTMAA5	4470502	HUGHES269	8850422	KUHLOWD
3960124	GULSTMAA5	4470504	HUGHES269	5090204	LAIKFN10
3970104	GULSTMAA5	4470702	HUGHES369	5090206	LAIKFN10
3970106	GULSTMAA5	4470704	HUGHES369	5090208	LAIKFN10
*G1159	GULSTMG1159	4470706	HUGHES369	5170102	LEAK 23
3953505	GULSTMG1159	4470718	HUGHES369	5170302	LEAK 24
3970108	GULSTMG1159	4470720	HUGHES369	5170304	LEAK 24
3952202	GULSTMG159	4470722	HUGHES369	5170306	LEAK 24
3951502	GULSTMG44	4470728	HUGHES369	5170307	LEAK 24
3951504	GULSTMG44	4470730	HUGHES369	5170308	LEAK 24
3951506	GULSTMG44	4470802	HUGHES369	5170309	LEAK 24
3951508	GULSTMG44	4470806	HUGHES369	5170310	LEAK 24
3951802	GULSTMG73	4470905	HUGHES369	5170311	LEAK 24
3960401	GULSTMG47	*DH104	HAKSLYDH104	5170316	LEAK 24
4300302	HELIO H250	2800402	HAKSLYDH104	5170317	LEAK 24
4300802	HELIO H295	2800404	HAKSLYDH104	5170506	LEAK 25
4300803	HELIO H295	2800406	HAKSLYDH104	5170509	LEAK 25
4301101	HELIO H295	2800408	HAKSLYDH104	5170511	LEAK 25
4301102	HELIO H295	2800410	HAKSLYDH104	5170513	LEAK 25
4301104	HELIO H295	2800412	HAKSLYDH104	5170514	LEAK 25
4300102	HELIO H391	2800414	HAKSLYDH104	5170516	LEAK 25
4300104	HELIO H391	2800416	HAKSLYDH104	5170600	LEAK 35
4300106	HELIO H391	2800417	HAKSLYDH104	5170601	LEAK 35
4300202	HELIO H395	2800418	HAKSLYDH104	5170602	LEAK 35
4300204	HELIO H395	2800420	HAKSLYDH104	5170603	LEAK 35
4300206	HELIO H395	*DH125	HAKSLYDH125	1360306	LET L13
3376502	HILLERUM1100	1500204	HAKSLYDH125	*1329	LKHEED1329
4360102	HILLERUM12	4210112	HAKSLYDH125	5263102	LKHEED1329
4360103	HILLERUM12	4230102	HAKSLYDH125	5263104	LKHEED1329
4360104	HILLERUM12	4230112	HAKSLYDH125	5263106	LKHEED1329
4360105	HILLERUM12	4230130	HAKSLYDH125	5263108	LKHEED1329
4360106	HILLERUM12	4230134	HAKSLYDH125	5263110	LKHEED1329
4360107	HILLERUM12	4230160	HAKSLYDH125	5263116	LKHEED1329
4360108	HILLERUM12	1440502	HYNES B2	5263119	LKHEED1329
4360109	HILLERUM12	1440504	HYNES B2	5263125	LKHEED1329
4360110	HILLERUM12	1440506	HYNES B2	5261602	LKHEED18
4360111	HILLERUM12	1440508	HYNES B2	5261603	LKHEED18
4360112	HILLERUM12	0142002	ISRAEL1121	5261604	LKHEED18
4360113	HILLERUM12	0142006	ISRAEL1121	5261606	LKHEED18
4360114	HILLERUM12	0142010	ISRAEL1121	5261608	LKHEED18
4360115	HILLERUM12	*1124	ISRAEL1124	5261610	LKHEED18
4360116	HILLERUM12	4500102	ISRAEL1124	5261612	LKHEED18
4360117	HILLERUM12	4500103	ISRAEL1124	5261614	LKHEED18
4360118	HILLERUM12	4690502	JBMSTRDGA15	5261616	LKHEED18
4360119	HILLERUM12	4690504	JBMSTRDGA15	5261618	LKHEED18
4360120	HILLERUM12	4690506	JBMSTRDGA15	5261620	LKHEED18
4360121	HILLERUM12	4690508	JBMSTRDGA15	5261622	LKHEED18
4360122	HILLERUM12	4690510	JBMSTRDGA15	5261624	LKHEED18
4360124	HILLERUM12	4690512	JBMSTRDGA15	5261632	LKHEED18
4360125	HILLERUM12	4690514	JBMSTRDGA15	5261634	LKHEED18
4360126	HILLERUM12	4690516	JBMSTRDGA15	5261636	LKHEED18
4360127	HILLERUM12	4690518	JBMSTRDGA15	5261638	LKHEED18
4360128	HILLERUM12	8850402	KUHLOWD	5261640	LKHEED18
4360129	HILLERUM12	8850406	KUHLOWD	5261642	LKHEED18

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
5260102	LKHEEDPV1	5870102	MNMITEM18	6402307	NAMER F51
5260104	LKHEEDPV1	5870104	MNMITEM18	6402308	NAMER F51
5260106	LKHEEDPV1	5870106	MNMITEM18	6402309	NAMER F51
5260401	LKHEEDT33	5870108	MNMITEM18	6402310	NAMER F51
5260402	LKHEEDT33	5870202	MOONEYM20	6402314	NAMER F51
5260404	LKHEEDT33	5870204	MOONEYM20	6402502	NAMER NA260
5260406	LKHEEDT33	5870206	MOONEYM20	6402504	NAMER NA260
8190102	LUSCOM8	5870208	MOONEYM20	6402505	NAMER NA260
8190104	LUSCOM8	5870210	MOONEYM20	6402506	NAMER NA260
8190106	LUSCOM8	5870212	MOONEYM20	6402512	NAMER NA260
8190108	LUSCOM8	5870214	MOONEYM20	1922828	NAMER T6
8190110	LUSCOM8	5870216	MOONEYM20	6400402	NAMER T6
8190112	LUSCOM8	5870219	MOONEYM20	6400404	NAMER T6
8190114	LUSCOM8	5870220	MOONEYM20	6400405	NAMER T6
8190116	LUSCOM8	5870302	MOONEYM20	6400406	NAMER T6
8190118	LUSCOM8	5870304	MOONEYM20	6400407	NAMER T6
8190120	LUSCOM8	5870306	MOONEYM20	6400408	NAMER T6
8190122	LUSCOM8	5870308	MOONEYM20	6400410	NAMER T6
8190124	LUSCOM8	5870310	MOONEYM20	6400412	NAMER T6
8190126	LUSCOM8	5870312	MOONEYM20	6400414	NAMER T6
8190128	LUSCOM8	5870314	MOONEYM20	6400415	NAMER T6
8190130	LUSCOM8	5870316	MOONEYM20	6400416	NAMER T6
8190132	LUSCOM8	5870601	MOONEYM20	6400417	NAMER T6
8190154	LUSCOM8	5870605	MOONEYM20	6400418	NAMER T6
8190196	LUSCOM8	8120412	MRCHTIS205	6400419	NAMER T6
5450702	MAKTIN404	5780404	MTSBSIMU2	6400420	NAMER T6
5460102	MAULE M4	5780405	MTSBSIMU2	6400422	NAMER T6
5460104	MAULE M4	5780406	MTSBSIMU2	6400423	NAMER T6
5460105	MAULE M4	5780407	MTSBSIMU2	6400424	NAMER T6
5460106	MAULE M4	5780408	MTSBSIMU2	6400426	NAMER T6
5460108	MAULE M4	5780409	MTSBSIMU2	6400430	NAMER T6
5460112	MAULE M4	5780410	MTSBSIMU2	6400431	NAMER T6
5460114	MAULE M4	5780411	MTSBSIMU2	6400432	NAMER T6
5460116	MAULE M4	5780412	MTSBSIMU2	6400434	NAMER T6
5460128	MAULE M4	5780413	MTSBSIMU2	6400436	NAMER T6
5460130	MAULE M4	5780414	MTSBSIMU2	6400441	NAMER T6
5460132	MAULE M4	5780440	MTSBSIMU2	6400442	NAMER T6
5460133	MAULE M5	5780460	MTSBSIMU2	6120202	NAVAL N3N
5460134	PAULE M5	9230602	MULTECD16	6150118	NAVIONNAVIUM
5460135	MAULE M5	9230604	MULTECD16	6150132	NAVIONNAVIUM
5460137	MAULE M5	9230606	MULTECD16	6150134	NAVIONNAVIUM
5460204	MAULE M5	9230608	MULTECD16	6150136	NAVIONNAVIUM
5480102	MCLISHFUNK8	9230610	MULTECD16	6150138	NAVIONNAVIUM
5480104	MCLISHFUNK8	9230612	MULTECD16	6150140	NAVIONNAVIUM
5480106	MCLISHFUNK8	6400702	NAMER B25	6150142	NAVIONNAVIUM
5480108	MCLISHFUNK8	6400704	NAMER B25	6150144	NAVIONNAVIUM
5480202	MCLISHFUNK8	6400705	NAMER B25	6150148	NAVIONNAVIUM
5480204	MCLISHFUNK8	6400706	NAMER B25	6150160	NAVIONNAVIUM
5480206	MCLISHFUNK8	6400706	NAMER B25	6150162	NAVIONNAVIUM
5480208	MCLISHFUNK8	6400710	NAMER B25	6150164	NAVIONNAVIUM
5650202	MEYERSOTW	6400712	NAMER B25	6150166	NAVIONNAVIUM
5650204	MEYERSOTW	6400713	NAMER B25	6150168	NAVIONNAVIUM
5650206	MEYERSOTW	6400714	NAMER B25	6150170	NAVIONNAVIUM
5650208	MEYERSOTW	6400718	NAMER B25	6150172	NAVIONNAVIUM
5810102	MNCUUP90	6400719	NAMER B25	6150174	NAVIONNAVIUM
5810104	MNCUUP90	6402301	NAMER F51	6150176	NAVIONNAVIUM
5810107	MNCUUP90	6402302	NAMER F51	6150178	NAVIONNAVIUM
5810108	MNCUUP90	6402303	NAMER F51	6383006	NORU SV4
5810110	MNCUUP90	6402304	NAMER F51	8141608	OKLHELH19
5810130	MNCUUP90	6402305	NAMER F51	8141609	OKLHELH19
5870101	MNMITEM18	6402306	NAMER F51	8141610	OKLHELH19

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
8141612	ORLHELH19	7100602	PIPER J4	7102204	PIPER PA22
8141614	ORLHELH19	7100604	PIPER J4	7102206	PIPER PA22
8141616	ORLHELH19	7100605	PIPER J4	7102208	PIPER PA22
8141618	ORLHELH19	7100606	PIPER J4	7102210	PIPER PA22
056040H	PICARDAX6	7100608	PIPER J4	7102212	PIPER PA22
7001218	PICARDAX6	7100610	PIPER J4	7102214	PIPER PA22
700122A	PICARDAX6	7100612	PIPER J4	7102216	PIPER PA22
7090103	PILATSB4	7100614	PIPER J4	*PA23	PIPER PA23
7090104	PILATSB4	7100202	PIPER J5	7102302	PIPER PA23
7106001	PIPER 600	7100204	PIPER J5	7102303	PIPER PA23
7106002	PIPER 600	7100702	PIPER J5	7102304	PIPER PA23
7106010	PIPER 600	7100704	PIPER J5	7102305	PIPER PA23
7106011	PIPER 600	7100706	PIPER J5	7102306	PIPER PA23
7106012	PIPER 600	7100708	PIPER J5	7102308	PIPER PA23
7106014	PIPER 600	7100710	PIPER J5	7102309	PIPER PA23
8360604	PIPER 600	7100712	PIPER J5	7102310	PIPER PA23
8360605	PIPER 600	7101202	PIPER PA12	7102402	PIPER PA24
8360607	PIPER 600	7101204	PIPER PA12	7102403	PIPER PA24
7100402	PIPER J2	7101402	PIPER PA14	7102404	PIPER PA24
7100412	PIPER J2	7101502	PIPER PA15	7102406	PIPER PA24
7100501	PIPER J3	7101602	PIPER PA16	7102407	PIPER PA24
7100502	PIPER J3	7101604	PIPER PA16	7102408	PIPER PA24
7100503	PIPER J3	7101702	PIPER PA17	7102409	PIPER PA24
7100504	PIPER J3	7101802	PIPER PA18	7102502	PIPER PA25
7100506	PIPER J3	7101804	PIPER PA18	7102503	PIPER PA25
7100508	PIPER J3	7101806	PIPER PA18	7102504	PIPER PA25
7100509	PIPER J3	7101808	PIPER PA18	7102508	PIPER PA25
7100510	PIPER J3	7101809	PIPER PA18	7102510	PIPER PA28
7100511	PIPER J3	7101810	PIPER PA18	7102801	PIPER PA28
7100512	PIPER J3	7101811	PIPER PA18	7102802	PIPER PA28
7100514	PIPER J3	7101812	PIPER PA18	7102803	PIPER PA28
7100516	PIPER J3	7101813	PIPER PA18	7102804	PIPER PA28
7100518	PIPER J3	7101814	PIPER PA18	7102805	PIPER PA28
7100519	PIPER J3	7101815	PIPER PA18	7102806	PIPER PA28
7100520	PIPER J3	7101816	PIPER PA18	7102807	PIPER PA28
7100521	PIPER J3	7101818	PIPER PA18	7102808	PIPER PA28
7100522	PIPER J3	7101820	PIPER PA18	7102809	PIPER PA28
7100524	PIPER J3	7101822	PIPER PA18	7102810	PIPER PA28
7100525	PIPER J3	7101824	PIPER PA18	7102811	PIPER PA28
7100526	PIPER J3	7101826	PIPER PA18	7102812	PIPER PA28
7100527	PIPER J3	7101828	PIPER PA18	7102813	PIPER PA28
7100528	PIPER J3	7101830	PIPER PA18	7102814	PIPER PA28
710052P	PIPER J3	7101832	PIPER PA18	7102815	PIPER PA28
7100524	PIPER J3	7101834	PIPER PA18	7102816	PIPER PA28
710052S	PIPER J3	7101836	PIPER PA18	7102817	PIPER PA28
710052T	PIPER J3	7101837	PIPER PA18	7102818	PIPER PA28
7100530	PIPER J3	7101838	PIPER PA18	7102819	PIPER PA28
7100532	PIPER J3	7101860	PIPER PA18	7102824	PIPER PA28
7100534	PIPER J3	7101902	PIPER PA18	7102830	PIPER PA28
7100536	PIPER J3	7101903	PIPER PA18	*PA30	PIPER PA30
7100538	PIPER J3	7101904	PIPER PA18	7103002	PIPER PA30
7100540	PIPER J3	7101906	PIPER PA18	7103015	PIPER PA30
7100541	PIPER J3	7102002	PIPER PA20	7103902	PIPER PA30
7100542	PIPER J3	7102004	PIPER PA20	7104002	PIPER PA30
7100544	PIPER J3	7102006	PIPER PA20	*PA31	PIPER PA31
7100546	PIPER J3	7102008	PIPER PA20	7103102	PIPER PA31
7100548	PIPER J3	7102010	PIPER PA20	7103103	PIPER PA31
7100550	PIPER J3	7102012	PIPER PA20	7103104	PIPER PA31
7100552	PIPER J3	7102016	PIPER PA20	7103105	PIPER PA31
7101102	PIPER J3	7102202	PIPER PA22	7103110	PIPER PA31
7101104	PIPER J3	7102203	PIPER PA22	7103120	PIPER PA31

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
7103124	PIPER PA31T	7630515	RKWE11690TP	8050108	SCWZERSG1
7103126	PIPER PA31T	7630520	RKWE11700	8050110	SCWZERSG1
7103127	PIPER PA31T	*NA265	RKWE11NA265	8050111	SCWZERSG1
7103128	PIPER PA31T	6402602	RKWE11NA265	8050112	SCWZERSG1
7103206	PIPER PA32	6402604	RKWE11NA265	8050113	SCWZERSG1
7103207	PIPER PA32	6402606	RKWE11NA265	8050114	SCWZERSG1
7103208	PIPER PA32	6402608	RKWE11NA265	8050116	SCWZERSG1
7103209	PIPER PA32	6402610	RKWE11NA265	8050118	SCWZERSG1
7103210	PIPER PA32	6402612	RKWE11NA265	8050120	SCWZERSG1
7103211	PIPER PA32	6402614	RKWE11NA265	8050122	SCWZERSG1
7103212	PIPER PA32	6402618	RKWE11NA265	8050124	SCWZERSG1
7103213	PIPER PA32	7630101	RKWE11NA265	8050126	SCWZERSG1
7103214	PIPER PA32	7630104	RKWE11NA265	8050146	SCWZERSG1
7103215	PIPER PA32	7630106	RKWE11NA265	8050147	SCWZERSG1
7103216	PIPER PA32	7630107	RKWE11NA265	8050148	SCWZERSG1
7103218	PIPER PA32	7630108	RKWE11NA265	8050149	SCWZERSG1
7103220	PIPER PA32	7640102	ROBSINK22	8050151	SCWZERSG1
7103222	PIPER PA32	3801206	ROLSCHLS	8050153	SCWZERSG1
*PA34	PIPER PA34	3801208	ROLSCHLS	8050501	SCWZERSG1
7103404	PIPER PA34	3801211	ROLSCHLS	8050502	SCWZERSG1
7103405	PIPER PA34	3801213	ROLSCHLS	8050504	SCWZERSG1
7103406	PIPER PA34	3801214	ROLSCHLS	8050515	SCWZERSG1
7103407	PIPER PA34	3801250	ROLSCHLS	8050604	SCWZERSG1
7103408	PIPER PA34	7830502	RYAN ST3	8050202	SCWZERSG2
7103420	PIPER PA34	7830504	RYAN ST3	8050204	SCWZERSG2
7103602	PIPER PA36	7830506	RYAN ST3	8050206	SCWZERSG2
7103610	PIPER PA36	7830402	RYAN STA	8050207	SCWZERSG2
7103612	PIPER PA36	7830404	RYAN STA	8050210	SCWZERSG2
7103614	PIPER PA36	38015H2	SCHLEKAS15	8050602	SCWZERSG2
7103812	PIPER PA38	38015H2	SCHLEKAS15	8050604	SCWZERSG2
7104202	PIPER PA42	3801505	SCHLERASM19	8050606	SCWZERSG2
*PA44	PIPER PA44	3801508	SCHLERASM19	8050608	SCWZERSG2
7104402	PIPER PA44	3801503	SCHLERASM20	8050610	SCWZERSG2
7104404	PIPER PA44	3801506	SCHLERASM20	8050612	SCWZERSG2
0140302	PROFJT200	3801559	SCHLERK8	8050614	SCWZERSG2
0140304	PROFJT200	3801563	SCHLERK8	8051404	SCWZERSG2
0140306	PROFJT200	3801567	SCHLERK8	8051604	SCWZERSG2
0140308	PROFJT200	38019VK	SCHLERK8	8051606	SCWZERSG2
0140312	PROFJT200	38019VL	SCHLERK8	8070802	SEMCO CLNGER
0140314	PROFJT200	3801525	SCHLEKKA6	8071701	SEMCO MODEL T
5650302	PROFJT200	3801528	SCHLEKKA6	8141602	SAKSKYSS5
5650304	PROFJT200	3801530	SCHLEKKA6	8141604	SAKSKYSS5
5650306	PROFJT200	3801533	SCHLEKKA6	8141606	SAKSKYSS5
5650308	PROFJT200	3801535	SCHLEKKA6	8141615	SAKSKYSS5
5650310	PROFJT200	3801536	SCHLEKKA6	8141618	SAKSKYSS5
6480116	RANKIN65	3801537	SCHLEKKA6	8141616	SAKSKYSS5
6480118	RANKIN65	3801540	SCHLEKKA6	814161J	SAKSKYSS5
6480120	RANKIN65	3801542	SCHLEKKA6	8141622	SAKSKYSS5
6480122	RANKIN65	3801545	SCHLEKKA6	8141630	SAKSKYSS5
6480124	RANKIN65	3801554	SCHLEKKA6	8141632	SAKSKYSS5
7480502	RAVEN RX6	3952702	SCWZERG164	8141801	SAKSKYSS8
05604AT	RAVEN S50	3952704	SCWZERG164	8141802	SAKSKYSS8
05604XW	RAVEN S50	3952802	SCWZERG164	8141804	SAKSKYSS8
7480202	RAVEN S50	3952803	SCWZERG164	8141806	SAKSKYSS8
7480204	RAVEN S50	8050101	SCWZERSG1	8141808	SAKSKYSS8
7480402	RAVEN S55	8050102	SCWZERSG1	8141811	SAKSKYSS8
0560477	RAVEN S60	8050103	SCWZERSG1	8141814	SAKSKYSS8
7480604	RAVEN S60	8050104	SCWZERSG1	8141815	SAKSKYSS8
7480606	RAVEN S60	8050105	SCWZERSG1	814181A	SAKSKYSS8
7480610	RAVEN S60	8050106	SCWZERSG1	8141831	SAKSKYSS8
7630410	RKWE11500	8050107	SCWZERSG1	8141836	SAKSKYSS8

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

FAA	SDR	FAA	SDR	FAA	SDR
8141837	SKRSKY58	8631514	STNSONSR9	8850326	TCRAFTBF
8141839	SKRSKY58	8631516	STNSONSK9	8850328	TCRAFTBF
8141803	SKRSKY58T	8631518	STNSUNSK9	8850330	TCRAFTBF
8141805	SKRSKY58T	8631520	STNSONSK9	8850332	TCRAFTBF
8141807	SKRSKY58T	8631522	STNSONSK9	8850334	TCRAFTBF
8141840	SKRSKY58T	8631524	STNSUNSR9	8850336	TCRAFTBF
8141842	SKRSKY58T	8631526	STNSONSK9	8850338	TCRAFTBF
8143006	SKRSKY76	8631528	STNSUNSR9	8850340	TCRAFTBF
0140202	SLINDS100	8631802	STNSONV77	8850342	TCRAFTBF
0140203	SLINDS100	8631804	STNSUNV77	8850344	TCRAFTBF
0140204	SLINDS100	3080202	STOLAMRC3	8850346	TCRAFTBL
0140208	SLINDS100	3080203	STOLAMRC3	8850348	TCRAFTBL
0140210	SLINDS100	3080204	STOLAMRC3	8850350	TCRAFTBL
9550102	SLINDS100	3080206	STOLAMRC3	8850352	TCRAFTBL
9550104	SLINDS100	5410102	STOLAMRC3	8850354	TCRAFTBL
9550112	SLINDS100	8730202	SUPAC LA	8850356	TCRAFTBL
8360602	SMITH 600	8730204	SUPAC LA	8850358	TCRAFTBL
8360604	SMITH 600	8730206	SUPAC LA	8890402	TEMCO 11A
8360605	SMITH 600	8730208	SUPAC LA	8890404	TEMCO 11A
8360606	SMITH 600	8730302	SUPAC V	8970105	THUNDRA7
8360607	SMITH 600	8730304	SUPAC V	8970106	THUNDRA7
8360802	SMITH 600	8730306	SUPAC V	8970107	THUNDRA7
8360806	SMITH 600	8730308	SUPAC V	8970108	THUNDRA7
8680801	SNIAS 350	*SA226	SWRNGNSA226	8970110	THUNDRA7
8680802	SNIAS 350	8780122	SWRNGNSA226	6150104	TMPSONNAVION
8680803	SNIAS 350	8780402	SWRNGNSA226	6150106	TMPSONNAVION
8680506	SNIAS SA318	8780404	SWRNGNSA226	6150108	TMPSONNAVION
8680508	SNIAS SA318	8780405	SWRNGNSA226	6150110	TMPSONNAVION
8680511	SNIAS SA318	8780406	SWRNGNSA226	6150112	TMPSONNAVION
8402842	SOCATAMS894	*SA26	SWRNGNSA26	6150114	TMPSONNAVION
8400125	SOCATARALLYE	8780102	SWRNGNSA26	6150116	TMPSONNAVION
8400131	SOCATARALLYE	8780112	SWRNGNSA26	6150120	TMPSONNAVION
8400135	SOCATARALLYE	8850202	TCRAFTA	6150122	TMPSONNAVION
38019VC	SPHKTHCIRRUS	8850302	TCRAFTBC	6150146	TMPSONNAVION
38019VE	SPHKTHCIRRUS	8850304	TCRAFTBC	1181062	TOMCAT47BELL
3801943	SPHKTHNIMBUS	8850306	TCRAFTBC	2390101	TOMCAT47BELL
3801925	SPHKTHNIMBUS	8850308	TCRAFTBC	2390102	TOMCAT47BELL
38019VD	SPHKTHNIMBUS	8850310	TCRAFTBC	2390202	TOMCAT47BELL
38019VF	SPHKTHNIMBUS	8850312	TCRAFTBC	2390204	TOMCAT47BELL
38019VG	SPHKTHNIMBUS	8850314	TCRAFTBC	0190402	TKYTEKK
38019VJ	SPHKTHNIMBUS	8850316	TCRAFTBC	0190404	TKYTEKK
8100602	STBROSSD3	8850318	TCRAFTBC	9230102	UNIVACGC1
8110102	STBROSSD3	8850320	TCRAFTBC	9230104	UNIVACGC1
8632002	STNSON10	8850321	TCRAFTBC	9230106	UNIVACGC1
8632004	STNSON10	8850322	TCRAFTBC	9230108	UNIVACGC1
8632102	STNSON10	8850323	TCRAFTBC	9230110	UNIVACGC1
8632104	STNSON10	8850324	TCRAFTBC	9230112	UNIVACGC1
8632106	STNSON10	9230902	TCRAFTBC	9230402	UNIVAR108
8630202	STNSUNL5	9230904	TCRAFTBC	9230404	UNIVAR108
8630204	STNSUNL5	9230906	TCRAFTBC	9230406	UNIVAR108
8630206	STNSUNL5	9230908	TCRAFTBC	9230408	UNIVAR108
8630208	STNSUNL5	9230910	TCRAFTBC	9230412	UNIVAR108
8630210	STNSUNL5	9230912	TCRAFTBC	9230414	UNIVAR108
8630212	STNSUNL5	9230914	TCRAFTBC	9230416	UNIVAR108
8630214	STNSUNL5	9230916	TCRAFTBC	9230418	UNIVAR108
8631502	STNSUNSK9	9230918	TCRAFTBC	0420102	UNIVAR415
8631504	STNSUNSR9	9230920	TCRAFTBC	0420104	UNIVAR415
8631506	STNSUNSK9	9230922	TCRAFTBC	0420202	UNIVAR415
8631508	STNSUNSK9	9230924	TCRAFTBC	0420204	UNIVAR415
8631510	STNSUNSK9	9230926	TCRAFTBC	0420302	UNIVAR415
8631512	STNSUNSK9	9230928	TCRAFTBC	0420304	UNIVAR415

TABLE D-1. SDR AIRCRAFT GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

<u>FAA</u>	<u>SDR</u>	<u>FAA</u>	<u>SDR</u>	<u>FAA</u>	<u>SDR</u>
0420306	UNIVAR415	0190718	WAGNER65		
0420308	UNIVAR415	0190920	WAGNER65		
0420310	UNIVAR415	0190922	WAGNER65		
0420312	UNIVAR415	0190924	WAGNER65		
0420314	UNIVAR415	0190926	WAGNER65		
0420316	UNIVAR415	0190928	WAGNER65		
0420318	UNIVAR415	0190930	WAGNER65		
0420320	UNIVAR415	0190932	WAGNER65		
0420322	UNIVAR415	0190934	WAGNER65		
0420324	UNIVAR415	9630404	WTHKLY201		
0420326	UNIVAR415	9630406	WTHKLY201		
0420328	UNIVAR415	9630408	WTHKLY201		
0420330	UNIVAR415	9630410	WTHKLY201		
0420332	UNIVAR415				
0420334	UNIVAR415				
0420336	UNIVAR415				
0420338	UNIVAR415				
0420340	UNIVAR415				
0420402	UNIVAR415				
0420404	UNIVAR415				
0420406	UNIVAR415				
0420408	UNIVAR415				
0420410	UNIVAR415				
0420502	UNIVAR415				
0420504	UNIVAR415				
0420702	UNIVAR415				
0420722	UNIVAR415				
0540102	UNIVAR415				
0540104	UNIVAR415				
5872014	UNIVAR415				
5872018	UNIVAR415				
5940202	VARGA 2150				
5940204	VARGA 2150				
9350102	VARGA 2150				
9470204	VICKER745				
9470402	VICKER745				
9470404	VICKER745				
9470602	VICKER745				
9601202	WACU ASU				
9600702	WACO GAE				
9600304	WACU R				
9600422	WACU R				
9600306	WACU U				
9600404	WACO U				
9600405	WACU U				
9600508	WACU U				
9600510	WACU U				
9601302	WACO UPF7				
9601304	WACU UPF7				
9600816	WACO YK				
9600818	WACU YK				
9600832	WACU YK				
9600834	WACO YK				
9600835	WACO YK				
9600836	WACU YK				
9600838	WACO YK				
9600840	WACU YK				
0190406	WAGNER65				
0190712	WAGNER65				
0190714	WAGNER65				
0190716	WAGNER65				

APPENDIX E.

SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODE TABLE

THIS TABLE SHOWS THE CORRESPONDENCE BETWEEN THE SERVICE DIFFICULTY REPORTING (SDR) ENGINE GROUP NAMES AND THE FAA ENGINE MANUFACTURER/MODEL (MM) CODES AND APPEARS IN ALPHABETICAL ORDER BY SDR NAME. THE SDR NAMES COMBINE MM CODES FOR ENGINES OF SIMILAR DESIGN INTO GROUPS FOR ANALYTIC PURPOSES. THE TABLE CONTAINS ENTRIES FOR ALL THE SDR NAMES APPEARING IN THE ENGINE STATISTICS TABLE IN THE BODY OF THIS REPORT.

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES

SDR	FAA	SDR	FAA	SDR	FAA
ALLSN 250C	03002	CONT 0520	*0520	JACOBSR915	35005
ALLSN 250C	03011	CONT 0520	17032	LYC LTS101	41560
ALLSN 250C	03013	CONT 0520	17035	LYC 0145	41501
ALLSN 501D	*501D	CONT 0520	17040	LYC 0145	41502
ALLSN 501D	03004	CONT R670	17016	LYC 0145	41503
ALLSN 501D	03005	CONT R670	17018	LYC 0235	41505
ALLSN 501D	03006	DHAVXXG1PSY	20004	LYC 0290	41506
AMTKMCMCCULH	42501	PCD 6440	26003	LYC 0320	41500
ARSRCHTFE731	*TFE7	FRNKLN4AC150	27002	LYC 0320	41508
ARSRCHTFE731	01518	FRNKLN4AC150	27003	LYC 0320	41509
ARSRCHTFE331	*TFE3	FRNKLN4AC150	27004	LYC 0340	41510
ARSRCHTFE331	01502	FRNKLN4AC176	27006	LYC 0360	41504
ARSRCHTFE331	01506	FRNKLN4AC176	27007	LYC 0360	41511
ARSRCHTFE331	01508	FRNKLN4AC199	27008	LYC 0360	41513
ARSRCHTFE331	01510	FRNKLN4AC199	27009	LYC 0360	41514
ARSRCHTFE331	01512	FRNKLN4AC199	27010	LYC 0360	41515
CONT 6285	17038	FRNKLN6A4150	27024	LYC 0360	41522
CONT 975	17037	FRNKLN6A4165	27025	LYC 0360	41524
CONT A40	17001	FRNKLN6A4200	27027	LYC 0435	*0435
CONT A50	17002	FRNKLN6A8215	27030	LYC 0435	41516
CONT A65	17003	FRNKLN6AV335	27020	LYC 0435	41517
CONT A75	17005	FRNKLN6AV350	27043	LYC 0435	41518
CONT A80	17006	FRNKLN6V4	27033	LYC 0435	41519
CONT C125	17011	FRNKLN6V6245	27036	LYC 0435	41520
CONT C145	17012	FRNKLN6VS335	27040	LYC 0435	41521
CONT C85	17008	GE CF700	*CF70	LYC 0435	41523
CONT C90	17009	GE CF700	30010	LYC 0435	41525
CONT E185	17014	GE CJ610	*CJ61	LYC 0435	41526
CONT E225	17015	GE CJ610	30002	LYC 0480	41527
CONT 0200	17020	GE CJ610	30006	LYC 0480	41529
CONT 0300	17022	GE CJ805	*CJ80	LYC 0540	*0540
CONT 0300	17024	GE CJ805	30004	LYC 0540	41530
CONT 0346	17033	GE CT58	*CT58	LYC 0540	41531
CONT 0360	17023	GE CT58	30001	LYC 0540	41532
CONT 0360	17025	GE CT58	30008	LYC 0540	41533
CONT 0470	*0470	GLADENK5	37503	LYC 0540	41534
CONT 0470	17026	GLADENR5	37504	LYC 0540	41535
CONT 0470	17027	JACOBPK755	35006	LYC 0540	41538
CONT 0470	17028	JACOBPR755	35007	LYC 0541	41536
CONT 0470	17029	JACOBPR755	35008	LYC 0541	41539
		JACOBSK755	35003	LYC 0720	41546

TABLE E-1. SDR ENGINE GROUP NAME - FAA MANUFACTURER/MODEL CODES
(CONTINUED)

SDR	FAA	SDR	FAA	SDR	FAA		
LYC	R680	41540	OTHER	67032	RROYCEDART	54506	
LYC	R680	41541	OTHER	67033	RROYCEUART	54507	
LYC	R680	41542	OTHER	67034	RROYCEUART	54508	
LYC	R680	41543	OTHER	67037	RROYCEDART	54509	
LYC	R680	41544	OTHER	67038	RROYCEDART	54522	
LYC	R680	41545	OTHER	67050	RROYCEDART	54553	
LYC	T53	41552	OTHER	99999	RROYCEGIPSY	20005	
MNASCO4		43504	PCKARDV1650	49001	RROYCEGIPSY	20006	
ONAN	848	99999	PWA	JT12	*JT12	RROYCEGIPSY	20007
OTHER		*AVON	PWA	JT12	52042	RROYCEGIPSY	20008
OTHER		*BAST	PWA	JT12	52052	RROYCEKRB211	*KRB21
OTHER		*CF6	PWA	JT15	52060	RROYCERB211	44554
OTHER		*R182	PWA	JT15	52112	RROYCERB211	54554
OTHER		*R335	PWA	JT3C	*JT3C	RROYCESPEY	*SPEY
OTHER		00585	PWA	JT3C	52036	RROYCESPEY	54519
OTHER		01505	PWA	JT3D	*JT3D	RROYCESPEY	54521
OTHER		03003	PWA	JT3D	52039	RROYCESPEY	54523
OTHER		03010	PWA	JT4	*JT4	RROYCEVIPER	*VIPER
OTHER		03012	PWA	JT4	52037	RROYCEVIPER	10201
OTHER		04501	PWA	JT8	*JT8	RROYCEVIPER	54550
OTHER		17013	PWA	JT8	52044	RROYCEVIPER	54552
OTHER		17030	PWA	JT8	52046	TMECA ARTST3	60003
OTHER		17037	PWA	JT8	52048	TMECA AST14T	60014
OTHER		20003	PWA	JT8	52049	TMECA AST18	60020
OTHER		26002	PWA	JT9	*JT9	TMECA AST2T	60006
OTHER		27005	PWA	JT9	02050	TMECA ASTJ	60007
OTHER		27011	PWA	JT9	52050	WARNER165	64504
OTHER		27026	PWA	PT6	*PT6	WARNER185	64505
OTHER		30005	PWA	PT6	52043	WARNER50	64503
OTHER		30020	PWA	PT6	61501	WRIGHTJ5	67007
OTHER		31701	PWA	PT6	61503	WRIGHTR760	67009
OTHER		37002	PWA	PT6	61504	WRIGHTR760	67010
OTHER		41549	PWA	PT6	61506	WRIGHTR760	67011
OTHER		41555	PWA	PT6T	52045	WRIGHTR975	67012
OTHER		49707	PWA	PT6T	61502	WRIGHTR975	67015
OTHER		49708	PWA	R1340	*R134		
OTHER		51001	PWA	R1340	52009		
OTHER		52001	PWA	R1340	52010		
OTHER		52047	PWA	R1340	52011		
OTHER		54501	PWA	R1340	52012		
OTHER		54510	PWA	R1340	52016		
OTHER		54517	PWA	R1830	*R183		
OTHER		60002	PWA	R1830	52017		
OTHER		60004	PWA	R1830	52018		
OTHER		60005	PWA	R1830	52019		
OTHER		60008	PWA	R1830	52020		
OTHER		60009	PWA	R2000	*R200		
OTHER		60012	PWA	R2000	52021		
OTHER		60014	PWA	R2000	52023		
OTHER		60030	PWA	R2800	*R280		
OTHER		67018	PWA	R2800	52024		
OTHER		67019	PWA	R2800	52025		
OTHER		67021	PWA	R2800	52026		
OTHER		67024	PWA	R985	*R985		
OTHER		67025	PWA	R985	52006		
OTHER		67026	PWA	R985	52007		
OTHER		67027	PWA	R985	52008		
OTHER		67028	RROYCEUAKT	*UAKT			
OTHER		67029	RROYCEDART	54503			
OTHER		67030	RROYCEDART	54504			
OTHER		67031	RROYCEDART	54505			

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